



# Equipment Vol. II

Laboratory products for your Equipment needs.

# Better solutions for your laboratory.

**Dependable, quality equipment** is essential to your laboratory's success. From centrifuges and refrigerators to incubators and microscopes, Cardinal Health offers the most advanced technology at **affordable prices**.

Cutting-edge equipment represents only a portion of the Cardinal Health complete laboratory product portfolio. Our comprehensive offering is designed to meet the needs of all disciplines, from histology to microbiology.

Our **knowledgeable sales professionals** will assist you in navigating the thousands of laboratory supplies from hundreds of **leading manufacturers**. Helping you to select the best products at the **best prices**.

Letting you get back to the business of running your lab.

## Catalogs designed for your lab...



To hear more about how we can support your lab, contact your Cardinal Health sales representative or call 800.964.5227.

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# Autoclaves and Sterilizers

## Nova Microcinerator

ARGOS TECHNOLOGIES - Designed to sterilize metal inoculating loops and needles without using an open flame, this 120V unit also eliminates aerosoling of microorganisms. The microcinerator protects your laboratory technicians from dangerous gases, flames and splatter because it uses infrared heat inside a ceramic tube. After reaching its optimum sterilization temperature of 815°C (1500°F), the loop or needle is sterilized within 5 to 7 seconds. A perforated stainless steel cowl protects the heating element. Unlike other models with fixed burner assemblies, this unit can be adjusted to multiple positions. The ergonomic design reduces hand fatigue by allowing the user to access the burner from a comfortable angle of entry.



| Cat. No. | Mfr. No. | Description         | Qty. |
|----------|----------|---------------------|------|
| ATS3011  | S3011    | Nova microcinerator | 1/ea |



## Chamber Brite™ Autoclave Cleaner

HEIDOLPH NORTH AMERICA - Fast, convenient and effective way to clean and descale steam sterilizers, including the chamber, reservoir and tubing. Premeasured packets replace messy liquids, measuring and scrubbing. Sprinkle one packet into the chamber and run. Recommended every 20 cycles of use or once per week, depending on usage. Regular use optimizes autoclave function and extends operating life.

| Cat. No.  | Mfr. No.  | Description       | Qty.     |
|-----------|-----------|-------------------|----------|
| C3512-163 | 023212803 | Autoclave cleaner | 10 pk/bx |

**Cardinal Health** products combine the **clinical effectiveness** you need for your laboratory patients—with the **cost-effectiveness** you require for your bottom line.



## Heidolph Tuttnauer® Analog Benchtop Steam Autoclaves

HEIDOLPH NORTH AMERICA - These manually operated benchtop autoclaves feature analog controls and gauges for simple operation. They are ideal for both solid and liquid sterilization. Designed with a chamber made of 316L stainless steel for long-lasting durability, they are equipped with a large reservoir to minimize fill-ups. The benchtop autoclaves require no special plumbing or venting for use.

Both fast and slow exhausts of chamber pressure are available, providing quick cycle times for solid materials and eliminating liquid boil-over. The continuous pressure purge system removes air pockets to help ensure thorough, even sterilization; a built-in drying cycle thoroughly dries absorbent materials and helps prevent rusting. Standard safety features include a heat-insulated, double-locking door and a low-water-level sensor that automatically discontinues operation, if there is insufficient water for the sterilization cycle. Analog controls and a pressure temperature gauge with peak indicator display your parameter settings at a glance. UL listed and CSA approved.

### Specifications:

Temperature range ..... 212° to 273°F (100° to 134°C)  
Time selection ..... 0 to 60 minutes

### Model 1730M (A9080-1) dimensions

Chamber ..... 7 x 12 in.  
Overall (W x D x H) ..... 17 x 16 x 12.5 in.

### Model 2340M (A9080-4) dimensions

Chamber ..... 9 x 18 in.  
Overall (W x D x H) ..... 20 x 20 x 15 in.

### Model 2540M (A9080-13) dimensions

Chamber ..... 10 x 18 in.  
Overall (W x D x H) ..... 20 x 20 x 15 in.

### Model 3545M (C3512-142) dimensions

Chamber ..... 12.2 x 18.5 in.  
Overall (W x D x H) ..... 23.5 x 21.5 x 18 in.

| Cat. No.  | Mfr. No.  | Description   | Qty. |
|-----------|-----------|---|------|
| A9080-1   | 023210002 | Model 1730M - 120V, 60 Hz, 1,050W - 3 stainless steel trays | 1/ea |
| A9080-4   | 023210100 | Model 2340M - 120V, 60 Hz, 1,400W - 3 stainless steel trays | 1/ea |
| A9080-13  | 023210304 | Model 2540M - 120V, 60 Hz, 1,400W - 4 stainless steel trays | 1/ea |
| C3512-142 | 023210631 | Model 3545M - 220V, 60 Hz, 2,200W - 2 stainless steel trays | 1/ea |

# Autoclaves and Sterilizers



## Heidolph Tuttnauer® Automated Electronic Benchtop Sterilizer with Printer

HEIDOLPH NORTH AMERICA - Every stage of the cycle, including water fill, heating, sterilization, exhaust and drying, are microprocessor controlled and are completely automatic with these electronic models. The digital display continuously shows you temperature, pressure and running time. Four fully adjustable, single-button programs make these sterilizers easy to use and ensure reproducible runs. The battery backup ensures that all parameter settings and controls are retained in the event of a power failure.

All electronic models offer: sterilization time to 59 minutes, temperature selection from 105°C to 137°C, in-line particle filter to protect valves, electronic pressure and temperature sensors, low-water alarm—sounds when reservoir needs to be filled and standby heating—keeps the chamber warm for quicker cycles.

The EP Model helps you meet GLP documentation requirements. This sterilizer has a built-in printer that provides a printed summary at the end of each cycle, documenting temperature, elapsed drying and sterilization times, selected cycle, cycle number, real time and date, as well as any errors or interruptions that may have occurred during the cycle.

### Specifications:

Temperature range.....105°C to 137°C

Time selection .....0 to 59 minutes

Chamber dimensions .....10 x 18 in.

Chamber volume .....23L

Overall (W x D x H) .....20 x 20 x 15 in.

| Cat. No. | Mfr. No.  | Description  | Qty. |
|----------|-----------|--|------|
| A9080-16 | 023210461 | Model 2540EP, with printer paper and 4 stainless steel trays, 10-in dia. chamber, 220V | 1/ea |

## Bacti-Cinerator™ IV Sterilizer

LEICA BIOSYSTEMS RICHMOND INC - Conveniently and efficiently sterilize inoculating loops, needles and culture tube mouths with these sterilizers.

Units kill microorganisms utilizing infrared heat produced by a ceramic core element with no asbestos, ensuring sterility and helping to prevent splatter across the work area.

Complete sterilization is achieved within 5 to 7 seconds at a temperature of 1500°F.

Featuring a small footprint, the units are ideal for both anaerobic and aerobic chambers. Select from models configured for different voltages. Replacement heating elements are also available separately. Sterilizer dimensions (L x W x H): 7 x 3 x 9 in.



| Cat. No. | Mfr. No. | Description                      | Qty. |
|----------|----------|----------------------------------|------|
| MS004002 | 394002   | 120V sterilizer                  | 1/ea |
| MS001373 | 39001373 | Replacement heating element 120V | 1/ea |

To order, call: 800.964.5227

[cardinalhealth.com](http://cardinalhealth.com)

## Replacement Heating Element For Bacti-Cinerator™ III Sterilizers

LEICA BIOSYSTEMS - Replacement core heating element for the 120V Bacti-Cinerator™. The ceramic heating element contains no asbestos. Designed to prevent splatter across work areas when utilized in the Bacti-Cinerator™. It is intended to accommodate loops, needles and culture tube mouths.

| Cat. No. | Mfr. No. | Description                        | Qty. |
|----------|----------|------------------------------------|------|
| MS001304 | 39001304 | Replacement heating element - 120V | 1/ea |



## Large Capacity Automatic Autoclave with Printer

TUTTNAUER - This large capacity automatic tabletop autoclave features a closed-door active drying system. Perfect for multi-doctor practices, clinics or surgery centers. A 15 x 30 in. chamber accommodates longer instruments or a large number of small instruments.

- Capacity for 15 full-size IMS cassettes
- Closed door active drying system to maintain sterility and ensure efficient drying of packs and pouches
- Hepa filter 0.2 µm air filter (replaceable)
- Easy-to-use, single touch control system increases productivity
- 3 pre-set sterilization programs
- Program and customize cycle parameters to suit your needs and maximize flexibility
- Integrated printer for cycle documentation
- Interdependent temperature and pressure monitoring
- Cycle information recovery in the case of power failure or cycle interruption
- Insufficient water detector with automatic shut-off
- Supplied with a 3 shelf stand
- Internal printer

| Cat. No. | Mfr. No. | Description                       | Qty. |
|----------|----------|-----------------------------------|------|
| 3870EAP  | 3870EAP  | Autoclave sterilizer with printer | 1/ea |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### PlasmaPrep™ Centrifuge

**CARDINAL HEALTH** - Our high-quality, cost-effective centrifuge offers 4 pre-programmed spin times:

- 30 sec. for platelet-rich plasma
- 3 min. for platelet-poor plasma
- 2 min. for intermediate spins
- 5 min. for hard spins

Tubes can be processed as they arrive, no need to wait for batches. Processes up to six samples at once. Accepts 10.25 x 47mm through 16 x 100mm tubes. The centrifuge is whisper-quiet and heavy-duty and is microprocessor controlled for ease of use. It has an automatic out-of-balance shut down and all the features to help keep you safe. Fast separation without high-speed risk for COAG or STAT. Not for use with gel separator tubes.

*PlasmaPrep™ is a trademark of Separation Technology, Inc.*



| Cat. No. | Mfr. No. | Description            | Qty. |
|----------|----------|------------------------|------|
| B4360B   | 100-103  | PlasmaPrep™ centrifuge | 1/ea |
| B4360-3  | 630-102  | Rotor tool             | 1/ea |

### SlidePrep Plus™ Cytology Centrifuge

**CARDINAL HEALTH** - Our SlidePrep Plus™ Cytology Centrifuge comes in a convenient, small size yet can process up to six specimens at once. Digital controls and easy-to-read LCD display enable users to alter or monitor current settings easily. The unit's memory stores up to 25 programs for instant recall. Three acceleration options allow users excellent flexibility and exceptional protection for fragile samples. Alarm reminds users at 1-minute intervals to remove specimens to protect them from air-drying and ensure consistent results. Built-in safety features can help reduce accidents, resulting in sample loss.



*SlidePrep Plus™ is a trademark of Separation Technology, Inc.*

| Cat. No.  | Mfr. No. | Description                | Qty. |
|-----------|----------|----------------------------|------|
| CH100-400 | 100-500  | SlidePrep Plus™ centrifuge | 1/ea |



Our focus is on  
your lab.

### Thermo Scientific Heraeus® Clinifuge® Centrifuge

**THERMO SCIENTIFIC** - The Thermo Scientific Heraeus® Clinifuge® centrifuge is ideal for clinical laboratory procedures such as rapidly processing patients' samples for blood, urine or fecal separations, for clinical chemistry, hematology, RBC or coag studies. The Heraeus® Clinifuge® centrifuge is extremely accurate, and the speed is controlled to within 1%, ensuring the highest possible reproducibility of runs. Accuracy is unaffected by power fluctuations, ambient temperature or other environmental influences.



This centrifuge employs a frequency-controlled, brushless induction drive system that runs quietly and requires virtually no maintenance. Microprocessor control simplifies operation, and an easy-to-use touch panel allows you to store parameters for one-button operation.

Solidly built, this centrifuge sits firmly on your benchtop and runs without vibration. An interior air circulation system keeps rotor temperature rise to a minimum. A steel lid-locking device ensures that the lid cannot be opened while the centrifuge is running. Centrifuge includes a 12-place, fixed-angle rotor for 10 and 15mL tubes, as well as adapters for 5 and 7mL tubes.

#### Specifications:

Maximum capacity ..... 12 x 10mL  
Maximum RCF ..... 2,600 x g

| Cat. No. | Mfr. No. | Description                | Qty.  |
|----------|----------|----------------------------|-------|
| C1700-5  | 75003539 | Clinifuge® centrifuge      | 1/ea  |
| C1700-15 | 75003760 | Replacement 12-place rotor | 1/ea  |
| C1700-22 | 75003762 | Rubber cushion             | 12/pk |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges



### Thermo Scientific Heraeus® Cryofuge® 5500i Refrigerated Floor Model Centrifuge

THERMO SCIENTIFIC - Thermo Scientific Heraeus® Cryofuge® 5500i large capacity centrifuges can be used in a wide range of environments for a variety of blood banking and clinical applications. Offering optimal capacity for small, blood processing centers and blood banks, these versatile centrifuges can accommodate blood bags, blood collection, clinical tubes and clinical analyzer tube racks. Each centrifuge features Thermo Scientific SMARTSpin® imbalance detection system, a Soft-Touch lid lock and a maintenance-free brushless induction drive. Rotors and accessories are sold separately.

#### Specifications:

Maximum capacity.....4 x 1000mL  
Maximum speed.....10,000 rpm  
Maximum RCF .....15,320 x g  
Temperature range.....-9° to +40° C  
Dimensions (H x W x D).....38 x 27 x 28 in.

| Cat. No.        | Mfr. No. | Description  | Qty.   |
|-----------------|----------|--|--------|
| <b>C1721-56</b> | 75004479 | Heraeus® Cryofuge® 5500i refrigerated centrifuge, 208V, 60 Hz, 12.9A | 1/ea   |
| <b>C1721-63</b> | 75006476 | 4 x 100mL rotor  | 1/ea   |
| <b>C1721-50</b> | 75006436 | Double bucket 2 x 500mL  | 1pr/ea |
| <b>C1721-52</b> | 75006477 | Round bucket 1L  | 1/ea   |
| <b>C1721-53</b> | 75006421 | Sealing cap  | 1pr/ea |

**Cardinal Health offers more than 80,000 laboratory products from 400 leading manufacturers.**

### Thermo Scientific Heraeus® Labofuge® 300 Clinical Centrifuge

THERMO SCIENTIFIC - Featuring horizontal rotor technology and a space-saving design, the Thermo Scientific Heraeus® Labofuge® 300 centrifuge comes with an 8 x 15mL swing-out rotor for processing blood collection tubes as well as pelleting cells and microorganisms. It can also accommodate a 12 x 10mL fixed-angle rotor (sold separately) for basic clinical applications. The centrifuge is suitable for processing 7, 10 and 15mL tubes, including tubes containing separation gel. Other features include quiet, maintenance-free brushless drive technology, precise microprocessor control and an adjustable digital timer from 0 to 99 min.



#### Specifications:

Maximum capacity.....12 x 10mL  
Maximum RCF .....2,028 x g

| Cat. No.        | Mfr. No. | Description   | Qty. |
|-----------------|----------|---|------|
| <b>C1800-1</b>  | 75003231 | Heraeus® Labofuge® centrifuge                             | 1/ea |
| <b>C1800-10</b> | 76003265 | Replacement horizontal rotor with tube adapters, 8 x 15mL | 1/ea |
| <b>C1800-13</b> | 76003266 | Replacement tube distance pad                             | 6/pk |

### Thermo Scientific Heraeus® Megafuge® 8 Centrifuge

THERMO SCIENTIFIC - The new Thermo Scientific Heraeus Megafuge 8 small benchtop centrifuge fits in to your lab and workflow.



- Designed for reliable, safe operation with biocontainment sealing options, including Thermo Scientific™ ClickSeal™ lids for glove-friendly, one-handed operation. ClickSeal™ lids provide broad chemical resistance with exceptional strength for durability and reliability
- Secure push-button Thermo Scientific™ Auto-Lock™ rotor exchange in as little as 3 seconds, providing application flexibility and clear chamber access for cleaning convenience. The Auto-Lock rotor exchange allows a quick switch between applications, from conical tubes to microtubes and microplates
- Intuitive interface for programming ease has one-touch operation with pre-saved protocols accessible via direct access key, available password protection and a highly visible backlit display for clear reading of parameters across the lab. The control panel is glove- and detergent-friendly
- Swinging bucket rotor maximum capacity is 24 x 5/7mL blood and urine tubes (with the Thermo Scientific TX-150 rotor)

#### Specifications:

Dimensions (H x W x D).....12.2 x 14.6 x 18.9 in.  
Maximum speed/RCF .....4500 rpm and 3260 x g

| Cat. No.         | Mfr. No. | Description              | Qty. |
|------------------|----------|--------------------------|------|
| <b>H75007210</b> | 75007210 | Ventilated, 120V 60Hz    | 1/ea |
| <b>H75007211</b> | 75007211 | Ventilated, 230V 50/60Hz | 1/ea |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges



### Thermo Scientific Heraeus® Megafuge® 16 Centrifuge Series

THERMO SCIENTIFIC - The Thermo Scientific Heraeus® Megafuge® 16 general-purpose 4 x 400mL centrifuge series delivers exceptional capacity, ergonomic features and value for routine processing needs.

The Heraeus® Megafuge® 16 general-purpose centrifuge series is ideal for everyday sample processing, including clinical protocols, cell culture applications and microplate processing, including clinical chemistry, hematology, RBC, coag studies, pathology/urinalysis, clinical microbiology, clinical immunology and immunological tests.

- Intuitive controls simplify operation and provide detailed information on a wide range of operating parameters and processing status for optimal performance
- Auto-Lock® rotor exchange enables push-button installation and exchange of rotors, saving time switching between applications
- Easy access to rotor chamber for quick cleaning, a healthier working environment and longer unit life
- Certified ClickSeal biocontainment lids enable one-handed open/close capability, eliminating screw caps and complicated clips
- Compact dimensions optimize work area and ergonomic height and curved design enables easy sample loading and unloading and easy cleaning

#### Specifications:

|                     |  |
|---------------------|--|
| Capacity .....      | 1.6L (4 x 400mL)   |
| Maximum speed ..... | 15,200 rpm   |
| Maximum RCF .....   | 25,830 x g   |
| Dimensions.....     | 23.8 L x 17.3 W x 14.2 in. H [34.3 in. H open]<br>(60.5 x 44 x 36cm [87cm open]) |

| Cat. No.         | Mfr. No. | Description                                      | Qty. |
|------------------|----------|--|------|
| <b>H75004231</b> | 75004231 | Heraeus® Megafuge® 16 - ventilated centrifuge    | 1/ea |
| <b>H75004271</b> | 75004271 | Heraeus® Megafuge® 16R - refrigerated centrifuge | 1/ea |



### Thermo Scientific Heraeus® Megafuge® 40 Centrifuge Series

THERMO SCIENTIFIC - The Thermo Scientific Heraeus® Megafuge® 40 Centrifuge Series offers exceptional capacity, ergonomic features and value for routine sample processing on the benchtop, including clinical protocols, cell culture applications and microplate processing, including clinical chemistry, hematology, RBC, coag studies, pathology/urinalysis, clinical microbiology, clinical immunology and immunological tests.

The Heraeus® Megafuge® 40 series can process up to 40 x 50mL conical tubes or 196 blood tubes, with biocontainment sealing options available. Proprietary design innovations enable safe, simple and comfortable operation every day.

- Intuitive controls simplify operation and provide detailed information on a wide range of operating parameters and processing status for optimal performance
- Auto-Lock® rotor exchange allows easy push-button installation and exchange of rotors, saving time switching between applications
- Easy access to rotor chamber for quick cleaning, a healthier working environment and longer unit life
- Certified ClickSeal biocontainment lids enable one-handed open/close capability, helping to eliminate screw caps and complicated clips
- Advanced rotor management system maximizes acceleration, braking and residual load imbalance for each rotor and bucket option
- Compact dimensions optimize work area and ergonomic height and curved design enables easy sample loading and unloading and easy cleaning

#### Specifications:

##### Ventilated Heraeus® Megafuge® 40

|                  |  |
|------------------|--|
| Dimensions ..... | 26.4 L x 22.2 W x 14.2 in. H [35.4 in. H open]<br>(67 x 56.5 x 36cm [90cm open]) |
|------------------|--|

##### Refrigerated Heraeus® Megafuge® 40R

|                        |                |
|------------------------|----------------|
| Temperature range..... | -10° to +40° C |
|------------------------|----------------|

|                            |          |
|----------------------------|----------|
| Refrigeration system ..... | CFC-free |
|----------------------------|----------|

|                 |  |
|-----------------|--|
| Dimensions..... | 26.4 L x 29.3 W x 14.2 in. H [35.4 in. H open]<br>(67 x 74.5 x 36cm [90cm open]) |
|-----------------|--|

| Cat. No.         | Mfr. No. | Description                                      | Qty. |
|------------------|----------|--|------|
| <b>H75004504</b> | 75004504 | Heraeus® Megafuge® 40 - ventilated centrifuge    | 1/ea |
| <b>H75004519</b> | 75004519 | Heraeus® Megafuge® 40R - refrigerated centrifuge | 1/ea |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges



### Thermo Scientific Heraeus® Multifuge® X1 Centrifuge Series

THERMO SCIENTIFIC - The Thermo Scientific Heraeus® Multifuge® X1 centrifuge series offers exceptional throughput and versatility with a broad range of rotors and adapters and energy-efficient operation. Heraeus® Multifuge® X1 centrifuges are ideal for clinical chemistry, hematology, RBC, coag studies, pathology/urinalysis, clinical microbiology, clinical immunology and immunological tests.

- Intuitive control panel and digital display
- Detailed operation information, including display of set and actual parameters, maximize run performance and temperature accuracy for improved sample protection
- Easily adjust speed, time and temperature, even during the run with the convenient keyboard for direct input
- Double temperature management system displays the air temperature in the chamber as well as the sample temperature, ensuring accurate control of the sample temperature during the run
- Secure, push-button AutoLock® rotor exchange in only 3 seconds for application versatility
- Advanced rotor management system maximizes acceleration, braking and residual load imbalance for each rotor and bucket option
- Space-saving design, conserves workspace
- Pre-cooling function with direct button

#### Specifications:

##### Ventilated Heraeus® Multifuge® X1

Dimensions.....23.8 L x 17.3 W x 14.2 in. H [34.3 in. H open]  
(60.5 x 44 x 36cm [87cm open])

##### Refrigerated Heraeus® Multifuge® X1R

Temperature range.....-10° to +40° C

Refrigeration system .....CFC-free

Dimensions.....23.8 L x 24.5 W x 14.2 in. H [34.3 in. H open]  
(60.5 x 62.3 x 36cm [87cm open])

| Cat. No.  | Mfr. No. | Description                                     | Qty. |
|-----------|----------|---|------|
| H75004211 | 75004211 | Heraeus® Multifuge® X1 - ventilated             | 1/ea |
| H75004251 | 75004251 | Heraeus® Multifuge® X1R - refrigerated          | 1/ea |
| H75003621 | 75003621 | BIOShield® 720 high speed swinging bucket rotor | 1/ea |
| H75003821 | 75003821 | BIOShield® 720 tube adapters                    | 1/ea |



### Thermo Scientific Heraeus® Multifuge® X3 Centrifuge Series

THERMO SCIENTIFIC - The Thermo Scientific Heraeus® Multifuge® X3 centrifuge series offers maximum performance and versatility, with exceptional energy efficiency and a broad range of rotors and adapters, to handle diverse laboratory applications like clinical chemistry, hematology, RBC, coag studies, pathology/urinalysis, clinical microbiology, clinical immunology and immunological tests.

- Intuitive control panel and digital display
- Detailed operation information, including display of set and actual parameters, maximize run performance and temperature accuracy for improved sample protection
- Easily adjust speed, time and temperature, even during the run with the convenient keyboard for direct input
- Double temperature management system displays the air temperature in the chamber as well as the sample temperature, ensuring accurate control of the sample temperature during the run
- Secure, push-button AutoLock® rotor exchange in only 3 seconds for application versatility
- Advanced rotor management system maximizes acceleration, braking and residual load imbalance for each rotor and bucket option
- Compact size conserves workspace
- Pre-cooling function with direct button

#### Specifications:

##### Ventilated Heraeus® Multifuge® X3

Dimensions.....26.4 L x 22.2 W x 14.2 in. H [35.4 in. H open]  
(67 x 56.5 x 36cm [90cm open])

##### Refrigerated Heraeus® Multifuge® X3R

Temperature range.....-10° to +40° C

Refrigeration system .....CFC-free

Dimensions.....26.4 L x 29.3 W x 14.2 in. H [35.4 in. H open]  
(67 x 74.5 x 36cm [90cm open])

| Cat. No.  | Mfr. No. | Description  | Qty. |
|-----------|----------|--|------|
| H75004516 | 75004516 | Heraeus® Multifuge® X3R - refrigerated centrifuge                                | 1/ea |
| H75004531 | 75004531 | Heraeus® Multifuge® X3F - ventilated centrifuge                                  | 1/ea |
| H75004537 | 75004537 | Heraeus® Multifuge® X3FR - refrigerated centrifuge, floor-standing configuration | 1/ea |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### Thermo Scientific Medilite Benchtop Centrifuge

THERMO SCIENTIFIC - Use Thermo Scientific

Medilite centrifuges for routine blood and urine separations and other low-speed applications for tube sizes up to 15mL or spin up to six 15mL or twelve 10mL tubes at 3,100 rpm for fast, positive separations. They also accommodate sealed tubes for aerosol containment. The centrifuges feature an integral mechanical timer that allows you to select spins up to 30 minutes or for an indefinite length via a hold-mode option. Other features include a power interrupt if the lid is opened during a run, rubber section feet for stability, a brushless motor for maintenance-free operation and viewports for independent speed verification and rotor rotation viewing. The centrifuges come complete with either a 6- or 12-place 45° angle rotor and standard tube shields.



#### Specifications:

|                        |                              |
|------------------------|------------------------------|
| Maximum capacity ..... | 6 x 15mL (C1590-3; C1590-4)  |
|                        | 12 x 10mL (C1590-5)          |
| Maximum speed .....    | 3,100 rpm (C1590-3; C1590-5) |
|                        | 2,700/3,100 rpm (C1590-4)    |
| Maximum RCF .....      | 1,228 x g (C1590-3; C1590-5) |
|                        | 920/1,228 x g (C1590-4)      |

| Cat. No.       | Mfr. No. | Description                      | Qty. |
|----------------|----------|----------------------------------|------|
| <b>C1590-3</b> | 004480F  | Medilite 6-place centrifuge 120  | 1/ea |
| <b>C1590-4</b> | 004490F  | Medilite 6-place centrifuge 220  | 1/ea |
| <b>C1590-5</b> | 004580F  | Medilite 12-place centrifuge 120 | 1/ea |

### Thermo Scientific Espresso Personal Microcentrifuge

THERMO SCIENTIFIC - The Thermo Scientific

Espresso 12-place centrifuge achieves speeds up to 14,600 rpm (14,500 x g) and complete with rotor, accommodates micro tubes from 0.5 to 2.0mL, or even smaller volumes with adapters.



Every aspect of the Espresso has been designed with the bench scientist in mind: from its bright display to its innovative controls.

Ideal for microsample processing, such as molecular biology tests and DNA/RNA isolation, the versatile, yet compact Espresso performs standard runs with a minimum of adjustments.

- Intuitive, single-knob control allows user to set parameters quickly and precisely
- Large LED display shows parameters clearly
- Easy-to-clean with fully autoclavable, non-corroding, pre-installed plastic rotor
- Fast spin up/spin down offers significant time savings that increase productivity
- 76.5 sq. in. footprint occupies minimal bench space
- Exceptionally quiet; allows users to work without distraction

| Cat. No.        | Mfr. No. | Description                    | Qty. |
|-----------------|----------|--------------------------------|------|
| <b>11210800</b> | 11210800 | Espresso microcentrifuge, 60Hz | 1/ea |



### Thermo Scientific Heraeus® Pico® and Fresco® Microcentrifuges

THERMO SCIENTIFIC - These microcentrifuges provide quick and efficient processing of microvolume samples, such as molecular biology tests and DNA/RNA isolation or hematocrit processing. Their fast acceleration/deceleration times provide higher throughput per hour and the extensive rotor selection and two speed options available (17,000 and 21,000 x g) easily allow for both complex and simple protocols. Intuitive controls and bright displays allow for easy setup and operation, and the integrated timer with HOLD mode is programmable from 1 through 99 minutes in 1 minute increments. For added safety, the Thermo Scientific ClickSeal® biocontainment rotor lid makes an audible click when a proper seal has been made, ensuring that samples are secure. Highly-resistant rotor materials allow vigorous cleaning and autoclaving. Small footprint minimizes bench space required.

Heraeus® Pico® models are ventilated and measure (H x W x D) 8.86 x 9.56 x 13.8 in. (225 x 243 x 352mm). Heraeus® Fresco® models are refrigerated, can be set from -9° to +40°C and measure (H x W x D) 12.9 x 11.6 x 17.5 in. (330 x 295 x 445mm).

#### Pico® and Fresco® 17, Pico® and Fresco® 21

|                                 |                                     |
|---------------------------------|-------------------------------------|
| Maximum RCF .....               | 17,000 x g (17) and 21,100 x g (21) |
| Maximum speed .....             | 13,300 rpm (17) and 14,800 rpm (21) |
| Acceleration/braking curves.... | 2 acceleration, 9 braking           |

| Cat. No.        | Mfr. No. | Description   | Qty.  |
|-----------------|----------|---|-------|
| <b>C1900-50</b> | 75002411 | Pico 17 microcentrifuge, 60 Hz and 24 x 1.5/2.0mL rotor, ClickSeal® lid   | 1/ea  |
| <b>C1900-56</b> | 75002416 | Pico 21 microcentrifuge, 60 Hz and 24 x 1.5/2.0mL rotor, ClickSeal® lid   | 1/ea  |
| <b>C1900-58</b> | 75002477 | Pico 21 microcentrifuge, 60 Hz and 24 x 1.5/2.0mL rotor with ClickSeal® lid; and dual row rotor 18 x 0.5mL and 18 x 2.0mL with screw-on lid | 1/ea  |
| <b>C1900-59</b> | 75002478 | Fresco 21 microcentrifuge, 60 Hz and 24 x 1.5/2.0mL rotor with ClickSeal® lid; dual 18 x 0.5mL and 18 x 2.0mL with screw-on lid             | 1/ea  |
| <b>C1900-60</b> | 75002492 | Pico 17 microcentrifuge, 60 Hz and Hematocrit rotor   | 1/ea  |
| <b>C1900-52</b> | 75003424 | 24 x 1.5/2.0mL rotor with ClickSeal® lid  | 1/ea  |
| <b>C1715-36</b> | 76003758 | 0.5/0.6mL microliter tube adapters  | 24/pk |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### Thermo Scientific Centra®-W Automatic Cell Washing System

THERMO SCIENTIFIC - Fast and easy to operate, this cell washing system performs a wash cycle in only 85 seconds. Set all of the steps of your wash cycle just once, and from then on, operate the unit by loading the rotor, shutting the cover and pressing the start button. After the spin cycle, the rotor adjusts to a precise decant angle, allowing it to retain more washed cells and remove more residual saline than manual techniques.

The unit's membrane touch control panel features easy-to-read, multicolored LED displays and logical international symbols. Displays show the number of the wash cycle in process and time remaining. Alarm sounds when saline reservoir is depleted or interrupted. Unit stops at completion of step in process to verify procedure. The panel has no protruding parts to puncture safety gloves or obstruct cleaning.

The autoclavable rotor is easy to remove, and the clear tube holders allow you to inspect samples and note any breakage. It accepts up to twelve 10 x 75mm or 12 x 75mm tubes with no need for clips or adapters. System has two-speed brushless induction motor, stainless steel shaft with sealed, permanently lubricated bearings and dynamic braking in automatic or manual modes. Unit includes rotor, clamp valve for saline flow control and initial supply of pump and feed tubing. Meets ISO 9001 certified quality system and IEC 1010-2-020. CSA certified.

#### Specifications:

Maximum capacity ..... Twelve 10 to 12 x 75mm tubes  
Maximum speed ..... 1,000 to 1,999 x g  
Dimensions (H x W x D) ..... 15½ x 12½ x 17 in.  
Power requirements ..... 100, 120, 220 or 240V, 50 or 60 Hz

#### Maximum speed

Spin cycle ..... 3550 rpm  
Decant cycle ..... 700 rpm

| Cat. No. | Mfr. No. | Description                              | Qty. |
|----------|----------|--|------|
| C1512-4  | 80300569 | Cell washing system - 100/120/240V, 60Hz | 1/ea |



### Thermo Scientific Sorvall® CW2 Plus Cell Washer

THERMO SCIENTIFIC - The Thermo Scientific Sorvall® CW2 Plus Cell Washer is the reliable choice for simplifying work and saving time in washing blood cells for antiglobulin reagent tests such as ABO compatibility, Rh testing, cross-matching and the Coombs procedure.

The Sorvall® CW2 Plus cell washing system is designed to support the most common applications requiring the automatic washing of donor blood. Desktop size, it offers a time-saving wash cycle, easy-to-read digital displays, easy-to-use touchpad controls and standardized, reproducible procedures. Simply insert the sample tubes, select the test parameters and benefit from reliable results in minutes, time after time.

- Fully automated for reproducible results
- Automated blood cell washing: standardized, consistent procedures eliminate the variations that result from manual protocols
- Automatic alerts: indicate if the saline level is low and when a run is complete
- Pump tubing is easily changed



| Cat. No. | Mfr. No. | Description  | Qty. |
|----------|----------|--|------|
| C1512-6  | 80300566 | Sorvall® CW2 Plus Cell Washer - 50Hz - fill/decant speed = 580 rpm | 1/ea |
| C1512-7  | 80300567 | Sorvall® CW2 Plus Cell Washer - 60Hz - fill/decant speed = 700 rpm | 1/ea |

### Thermo Scientific Sorvall® CW2 Plus Cell Washer Replacement Rotor

THERMO SCIENTIFIC - Replacement dual-angle rotor for 12 x 75mm tubes.

| Cat. No. | Mfr. No. | Description | Qty. |
|----------|----------|-------------|------|
| C1800-20 | 04285    | Rotor       | 1/ea |

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# Centrifuges and Accessories

## Centrifuges/Microcentrifuges



### Thermo Scientific Sorvall® RC3BP Plus Floor Model Centrifuge

THERMO SCIENTIFIC - The Thermo Scientific Sorvall® RC3BP large capacity centrifuge is ideal for a wide range of applications including blood banking, low-speed separations and general, large-batch and high-volume processing. It combines outstanding convenience with exceptional ease-of-use to expedite daily processing. State-of-the-art capabilities and a proven set of optional rotors and adapters enhance productivity.

- 6 x 1L capacity supports batch processing in biotech and pharmaceutical environments
- Intuitive keypad controls and large digital display
- Automated lid-locking mechanism protects operator
- Accumulated Centrifugal Effect (ACE), step-run and slow start/stop modes help ensure precise, reproducible separations
- 15-program memory provides one-touch recall of commonly used protocols
- Controllable acceleration/braking for delicate low-speed pelleting
- Security key helps prevent unauthorized access

| Cat. No. | Mfr. No. | Description  | Qty. |
|----------|----------|--|------|
| C1901-1  | 75007530 | Sorvall® RC 3BP large capacity centrifuge, 208-220V, 60 Hz, 19A (single phase) | 1/ea |

### Thermo Scientific 8 x 50mL Individually Sealed Fixed-Angle Rotor

THERMO SCIENTIFIC - The Thermo Scientific 8 x 50mL Sealed Fixed-Angle Rotor centrifuges have 8 conical tubes in individually sealed vessels.

**Compatible with:** Thermo Scientific Heraeus® Megafuge® 16, Heraeus® Multifuge® X1 Centrifuge series.

#### Specifications:

- Capacity ..... 8 x 50mL  
Maximum speed ..... 6,500 rpm  
Maximum RCF ..... 6,755 x g

| Cat. No.  | Mfr. No. | Description                        | Qty. |
|-----------|----------|------------------------------------|------|
| H75003694 | 75003694 | 8 x 50mL individually sealed rotor | 1/ea |



### Thermo Scientific BIOLiner® Swinging Bucket Rotor

#### Patented feature: ClickSeal Bucket Sealing System

THERMO SCIENTIFIC - The Thermo Scientific BIOLiner® Swinging Bucket Rotor delivers maximum flexibility at 3,500 rpm. Capacity flexibility with a variety of adapters: 750 to 5mL. Optional microplate carriers accommodate standard and deep well microplates for greater versatility.



**Compatible with:** Thermo Scientific Heraeus® Megafuge® 16, Heraeus® Multifuge® X1 Centrifuge series.

#### Specifications:

- Maximum capacity ..... 4 x 750mL (3L)  
Maximum speed ..... 3,500 rpm  
Maximum RCF ..... 2,739 x g

| Cat. No.  | Mfr. No. | Description       | Qty. |
|-----------|----------|-------------------|------|
| H75003667 | 75003667 | BIOLiner® rotor   | 1/ea |
| H75003668 | 75003668 | BIOLiner® buckets | 4/ea |

### Thermo Scientific HIGHPlate® 6000 Microplate Rotor

THERMO SCIENTIFIC - The Thermo Scientific HIGHPlate® 6000 microplate rotor accommodates a variety of filtration plates up to 80mm high.



**Compatible with:** Thermo Scientific Heraeus® Multifuge® X3/X3R

#### Specifications:

- Capacity ..... 2 x 5 standard plates  
Maximum speed ..... 6,300 rpm  
Maximum RCF ..... 6,168 x g

| Cat. No.  | Mfr. No. | Description                 | Qty. |
|-----------|----------|-----------------------------|------|
| H75003606 | 75003606 | HIGHPlate® microplate rotor | 1/ea |

### Thermo Scientific Microliter 48 x 2mL Sealed Aluminum Fixed-Angle Rotor

THERMO SCIENTIFIC - The Thermo Scientific Microliter 48 x 2mL Sealed Aluminum Fixed Angle Rotor supports micro-volume protocols. Capacity flexibility with adapters ranging from 12 to 24mL, from PCR to Microtubes.



**Compatible with:** Thermo Scientific Heraeus® Megafuge® 40/40R, Heraeus® Multifuge® X3/X3R Centrifuge series

#### Specifications:

- Capacity ..... 48 x 2mL  
Maximum speed ..... 15,200 rpm  
Maximum RCF ..... 25,314 x g

| Cat. No.  | Mfr. No. | Description               | Qty. |
|-----------|----------|---------------------------|------|
| H75003602 | 75003602 | Microliter 48 x 2mL rotor | 1/ea |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### Thermo Scientific TX-200 Swinging Bucket Rotors

THERMO SCIENTIFIC - The Thermo Scientific TX-200 Rotor accommodates a wide range of processing volumes. Capacity is flexible with round bucket adapters ranging from 180 to 2.0mL.

**Compatible with:** Thermo Scientific Heraeus® Multifuge® X1, Heraeus® Megafuge® 16 Centrifuge series

**Specifications:**

Capacity ..... 4 x 180mL (0.72L)  
Maximum speed ..... 5,500 rpm  
Maximum RCF ..... 5,580 x g



### Thermo Scientific TX-400 Swinging Bucket Rotors

**with Certified Clickseal®  
biocontainment lids**

THERMO SCIENTIFIC - The Thermo Scientific TX-400 Swinging Bucket Rotor supports a wide range of sample sizes and applications. The rotor accepts 32 to 76 blood tubes and up to 16 conical tubes in a single run. Flexible capacity with adapters ranging from 400 to 1.5mL.

**Compatible with:** Thermo Scientific Heraeus® Multifuge® X1, Heraeus® Megafuge® 16 Centrifuge series

**Specifications:**

Capacity ..... 4 x 400mL (1.6L)  
Maximum speed/RCF ..... 5,000 rpm/4,696 x g



| Cat. No.  | Mfr. No. | Description                                    | Qty. |
|-----------|----------|--|------|
| H75003629 | 75003629 | TX-400 Rotor                                   | 1/ea |
| H75003655 | 75003655 | Round Buckets, 400mL                           | 4/pk |
| H75003656 | 75003656 | ClickSeal® Biocontainment lids                 | 4/pk |
| H75003657 | 75003657 | Replacement O-rings for lids                   | 4/pk |
| H75003680 | 75003680 | Adapter for 19 x 5/7mL blood collection tube   | 4/pk |
| H75003701 | 75003701 | Adapter for 12 x 10mL blood collection tube    | 4/pk |
| H75003798 | 75003798 | Adapter for 7 x 15mL conical urine tube        | 4/pk |
| H75003681 | 75003681 | Adapter for 14 x 10/15mL blood collection tube | 4/pk |
| H75003704 | 75003704 | Adapter for 10 x 15mL round bottom tube        | 4/pk |
| H75003682 | 75003682 | Adapter for 9 x 15mL conical tube              | 4/pk |
| H75003700 | 75003700 | Adapter for 136 x 2mL conical microtube        | 4/pk |
| H75003683 | 75003683 | Adapter for 4 x 50mL conical tube              | 4/pk |

| Cat. No.  | Mfr. No. | Description                                       | Qty. |
|-----------|----------|---|------|
| H75003658 | 75003658 | TX-200 rotor                                      | 1/ea |
| H75003659 | 75003659 | Round buckets, 200mL                              | 4/pk |
| H75003660 | 75003660 | ClickSeal® biocontainment lids                    | 4/pk |
| H75003812 | 75003812 | Adapter for 48 x 2mL conical microtube            | 4/ea |
| H75003807 | 75003807 | Adapter for 8 x 14mL conical urine tube           | 4/ea |
| H75003810 | 75003810 | Adapter for 36 x 5/7mL round bottom open-top tube | 4/ea |
| H75003771 | 75003771 | Adapter for 20 x 15mL conical tube                | 4/ea |
| H75003808 | 75003808 | Adapter for 28 x 10/15mL blood collection tube    | 4/ea |
| H75003785 | 75003785 | Adapter for 32 x 5/7mL blood collection tube      | 4/ea |
| H75003803 | 75003803 | Adapter for 4 x 50mL conical or skirted tube      | 4/ea |

### Thermo Scientific TX-750 Swinging Bucket Rotor

**with Breakthrough Auto-Lock®  
Rotor Exchange technology**

THERMO SCIENTIFIC - The Thermo Scientific TX-750 Swinging Bucket Rotor delivers maximum flexibility at 4700 rpm. Capacity is flexible with adapters ranging from 750 to 1.5mL. Choose from round or rectangular buckets and a wide array of available adapters. Optional microplate carriers accommodate standard and deepwell microplates for greater versatility.



**Compatible with:** Thermo Scientific Heraeus® Megafuge® 40/40R, Multifuge® X3/X3R Centrifuge series

**Specifications:**

Capacity ..... 4 x 750mL (3L)  
Maximum speed ..... 4,700 rpm  
Maximum RCF ..... 4,816 x g

| Cat. No.   | Mfr. No. | Description                                      | Qty. |
|------------|----------|--|------|
| H75003607  | 75003607 | TX-750 rotor                                     | 1/ea |
| H75003608  | 75003608 | Round buckets, 750mL                             | 4/pk |
| H75003609A | 75003609 | ClickSeal® biocontainment lids for round buckets | 4/pk |
| H75003638  | 75003638 | Adapter for 28 x 50mL conical tube               | 4/pk |
| H75003639A | 75003639 | Adapter for 56 x 15mL conical tube               | 4/pk |
| H75003719  | 75003719 | Adapter 84 x 10/15mL blood collection tube       | 4/pk |
| H75003723  | 75003723 | Adapter 108 x 5/7mL blood collection tube        | 4/pk |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges



### Azer Mini Centrifuges

AZER SCIENTIFIC - These personal centrifuges quickly reach 6,000 rpm upon closing the lid. The small size makes them the perfect choice for quick spin downs right at your workspace. Simply open the lid and the rotor quickly decelerates to a stop. An 8-place microtube rotor is included and comes installed. A second rotor for 0.2mL PCR tubes and strips is also included and stored with the rotor removal key in a convenient compartment on the bottom of the centrifuge.

#### Specifications:

Maximum capacity.....8 x 1.5 to 2.0mL tubes or 2 x PCR strips  
Maximum speed.....6,000 rpm  
Maximum RCF .....2,000 x g  
Dimensions (W x D x H) .....4.5 x 5.9 x 4.5 in.

| Cat. No.          | Mfr. No.   | Description    | Qty. |
|-------------------|------------|----------------|------|
| <b>ESCSM120V</b>  | ESCSM120V  | With clear lid | 1/ea |
| <b>ESCSMB120V</b> | ESCSMB120V | With blue lid  | 1/ea |
| <b>ESCSMR120V</b> | ESCSMR120V | With red lid   | 1/ea |

### Z100A Compact Variable-Speed Clinical Centrifuge

AZER SCIENTIFIC - Ideal for use in a clinical setting or research lab, this variable-speed centrifuge runs up to 4,000 rpm. It features a clear lid that enables you to view the rotor and includes a safety lock feature that cuts power to the centrifuge when you open the lid. The easy-to-clean, rugged ABS housing adds durability. The centrifuge includes a 6 x 15mL fixed-angle rotor that accepts six 10 or 15mL tubes directly. Adapters that accept smaller tubes are available separately.



#### Specifications:

Maximum capacity.....6 x 15mL tubes  
Maximum speed.....4,000 rpm  
Maximum RCF .....1,900 x g  
Dimensions (W x D x H) .....11 x 13.75 x 10.2 in.  
Power requirements .....120V, 50/60 Hz

| Cat. No.          | Mfr. No.   | Description                                     | Qty. |
|-------------------|------------|---|------|
| <b>ESCR100A</b>   | ESCR100A   | Z100A centrifuge                                | 1/ea |
| <b>ESC020017A</b> | ESC020017A | Combination adapter for 5mL, 7mL and 10mL tubes | 6/pk |

### Spectrafuge 6C

AZER SCIENTIFIC - The Spectrafuge 6C has been designed for quick production of PPP (platelet poor plasma) and PRP (platelet rich plasma) as well as other applications in the clinical or research laboratory. The included 6-place rotor is capable of running round or conical bottom 15mL or 10mL tubes. Adapters for smaller tube sizes are available separately. The centrifuge's control panel features easy turn knobs and large digital displays for time and speed. Time can be set as low as 30 sec. and to the "on" position for continuous run. The Spectrafuge 6C is one of the smallest centrifuges in its class. The 8 x 9 in. footprint makes it ideal for almost any laboratory and it can easily be transported from lab to lab.



#### Specifications

Maximum speed .....6,500 rpm  
Maximum RCF .....4,000 x g  
Maximum capacity.....6 x 15mL  
Timer .....30 sec. to 30 min. with continuous and hold features  
Acceleration/deceleration .....14/27 sec.  
Dimensions .....8.25 x 9.5 x 7 in. (21 x 24 x 18cm)  
Rotor angle .....30°  
Electrical .....120V or 230V, 50-60 Hz

| Cat. No.         | Mfr. No.  | Description                     | Qty. |
|------------------|-----------|---------------------------------|------|
| <b>ESC6C120V</b> | ESC6C120V | With 6 x 15mL angle rotor, 120V | 1/ea |

### Z206A Compact Centrifuge

AZER SCIENTIFIC - This compact centrifuge is ideal for both clinical and research laboratories. The large display on the centrifuge's modern control panel, along with the precise control of the microprocessor allows for control over 10 levels of acceleration, deceleration and an imbalance sensor. With a maximum speed of 6,000 rpm, the Z206A can accept conical and round bottom tubes. Angle rotors available (not included).



| Cat. No.          | Mfr. No.    | Description                        | Qty. |
|-------------------|-------------|------------------------------------|------|
| <b>ESC206A120</b> | ESC206A120V | Compact centrifuge - without rotor | 1/ea |
| <b>ESC20096</b>   | ESC20096    | Angle rotor for 12 x 15mL tubes    | 1/ea |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### Z300 Universal Centrifuge

AZER SCIENTIFIC - This universal centrifuge has a broad speed range and a high g-force, making it ideal for use in a wide range of clinical and molecular biology applications. Select timed, continuous or momentary operation and two acceleration and deceleration rates. Safety features include a rotor recognition program that automatically identifies each rotor and limits it to the maximum rated speed and an imbalance detection system that stops operation of the unit if an improperly loaded rotor is detected. Centrifuge ESC300120V features an air circulating system to help prevent sample temperature from rising above room temperature, even during long runs. Rotors and accessories are available separately.



#### Specifications:

|  |                            |
|--|----------------------------|
| Maximum capacity.....                        | 4 x 100mL                  |
| Maximum speed .....                          | 13,500 rpm                 |
| Maximum RCF .....                            | 17,310 x g                 |
| Temperature range (Z300 K models only) ..... | -10° to +40°C              |
| Dimensions (W x D x H) .....                 | 14 x 18.1 x 13 in.         |
| Power requirements .....                     | 120V, 60 Hz or 230V, 50 Hz |

### BD Adams™ 6-Place Compact II Centrifuge with Rotor

BD DIAGNOSTICS - The BD Adams™ 6-Place Compact II is a cost effective, reliable centrifuge designed especially for the small laboratory. This single speed centrifuge is ideal for separating blood specimens prior to analytical testing and other separation needs.

The BD Adams™ 6-Place Compact II centrifuge with a 6-place head includes cushions, spacers and adapters to accommodate 2, 3, 5, 7, 10 and 15mL

BD Vacutainer® tubes; 13 x 75mm or 13 x 100mm

BD Vacutainer® tubes with BD Hemogard™ closures; and glass tubes from 12 x 75mm to 17 x 120mm. It has a 30-minute timer with a hold position for continuous operation. The brushless motor is designed to permit only a small temperature rise to protect specimen analytes. This centrifuge is complete with a built-in safety interlock switch and a cover that seals when closed.



#### Specifications:

|                          |                       |
|--------------------------|-----------------------|
| Maximum capacity.....    | 6 x 120mm             |
| Maximum speed .....      | 3200 rpm              |
| Maximum RCF .....        | 1163 x g              |
| Dimensions.....          | 10.5 x 14.5 x 8.5 in. |
| Power requirements ..... | 120V, 60 Hz, 1.5A     |

| Cat. No. | Mfr. No. | Description                     | Qty. |
|----------|----------|---------------------------------|------|
| C1410    | 420225   | BD Adams™ Compact II centrifuge | 1/ea |

| Cat. No.                                    | Mfr. No.   | Description                                   | Qty. |
|---|------------|---|------|
| ESC300120V                                  | ESC300120V | Z300 centrifuge, 120V                         | 1/ea |
| <b>Swing-out rotors</b>                     |            |   |      |
| ESC30050                                    | ESC30050   | For 4 x 50mL tubes                            | 1/ea |
| ESC30015                                    | ESC30015   | For 8 x 15mL tubes                            | 1/ea |
| ESC30016                                    | ESC30016   | With 2 microplate carriers, 2,762 x g maximum | 1/ea |
| ESC32371                                    | ESC32371   | With 4 buckets (without covers)               | 1/ea |
| <b>Inserts for swing-out rotor ESC32371</b> |            |   |      |
| ESC320724                                   | ESC320724  | For 4 x 10mL (16, 17 x 100mm) tubes           | 1/ea |
| ESC320725                                   | ESC320725  | For 7 x 5mL (10, 12 x 75mm) tubes             | 1/ea |
| <b>Carriers for Z300 models</b>             |            |   |      |
| ESC300122                                   | ESC300122  | For 1 x 50mL conical tubes                    | 1/ea |

### BD Dynac™ III Multispeed Centrifuge

BD DIAGNOSTICS - This multipurpose BD Dynac™ III centrifuge is designed for clinical laboratories performing separations in hematology, chemistry, urinalysis, blood banking, microbiology and cytology. The Dynac™ III delivers digitally precise, variable speed which is microprocessor controlled. The centrifuge is user programmable by speed, RCF and time. It is compact and portable and fits into most laboratory refrigerators. It can be used with interchangeable rotors and has a continuously adjustable electronic speed control and electronic tachometer, which permits the selection of a wide range of operating speeds. A zero speed switch, fail-safe positive cover lock and other safety features are incorporated for maximum operator protection. Ten programmable memory locations are available for storage of time and speed settings. Also features a one-piece aluminum guard bowl made of heavy gauge construction and rubber feet bolted to the bottom of the base plate to absorb vibrations. A variety of rotors and accessories for use with the centrifuge are available separately.



#### Specifications:

|                          |                    |
|--------------------------|--------------------|
| Maximum capacity.....    | 4 x 100mL          |
| Dimensions.....          | 12.5 x 16 x 19 in. |
| Power requirements ..... | 120V, 60 Hz, 6A    |

#### Maximum speed

Rotors ..... 3530 rpm (swing-out), 4000 rpm (fixed-angle)

#### Maximum RCF

Rotors ..... 2456 x g (swing-out), 2509 x g (fixed-angle)

| Cat. No. | Mfr. No. | Description              | Qty. |
|----------|----------|--------------------------|------|
| C1420-1A | 420104   | BD Dynac™ III centrifuge | 1/ea |

To order, call: 800.964.5227

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# Centrifuges and Accessories

## Centrifuges/Microcentrifuges



### BD Sero-Fuge™ 2000 Centrifuges

BD DIAGNOSTICS - The BD Sero-Fuge™ 2000 Centrifuges are extra-quiet, easy-to-use centrifuges that can accommodate a wide range of tube sizes for blood grouping, typing, cross matching and other cell-washing procedures. The tubes in the head swing out to an angle of 45° in motion and assume a vertical position when the centrifuge is at rest. The interchangeable heads serve as holders in which tubes can be filled, centrifuged, transported, incubated and emptied without individual handling. Tube positions are numbered for quick identification.

The BD Sero-Fuge™ 2000 Centrifuges feature a molded polycarbonate base and lid with a white polyurethane enamel finish. All are shock mounted on four cushioning rubber feet and feature an induction-type motor and special airflow design to minimize sound and vibration. As an additional safety measure, the locking cover with the lid seal gasket cannot be opened until the rotor has stopped. The on-board tachometer and solid-state digital timer help ensure precise control.

Other features include user-controlled end-of-cycle alarm, user-controlled brake, a timer/reset button and a cycle repeat/recall button. Interior and exterior are ergonomically designed for easy operation, cleaning and maintenance. The BD Sero-Fuge™ 2000 Centrifuges come complete with 12-place head and a 6 ft. heavy-duty, strain-relieved three-conductor cord. Choose a fixed-speed (3550 rpm) or dual-speed (2450 and 3550 rpm) model. Fixed-speed centrifuge is available in 115 and 230V models; dual-speed centrifuge is 115V.

#### Specifications:

Maximum capacity ..... 12 x 75mm  
Maximum speed ..... 3550 rpm  
Maximum RCF ..... 1000 x g  
Dimensions (L x W x H) ..... 17 x 13 x 12 in.  
Power requirements ..... 115 or 230V, 60 Hz

| Cat. No. | Mfr. No. | Description                  | Qty. |
|----------|----------|------------------------------|------|
| B5061-1  | 420351   | Fixed-speed model 2001, 115V | 1/ea |
| B5061-2  | 420352   | Dual-speed model 2002, 115V  | 1/ea |

### BD Triac™ Combination Centrifuge

BD DIAGNOSTICS - The BD Triac™ Combination Centrifuge is used for direct reading of microhematocrit determinations, plasma/serum separation from blood collection tubes and urine sedimentation. This centrifuge features three push-button modes: urine, blood and microhematocrit. After you select a spin time, the timer stays set for all subsequent operating cycles until it is reset.



The unit accommodates 12 microhematocrit tubes up to 75mm, eight 17 x 120mm conical centrifuge tubes or eight 7, 10 or 15mL vacuum blood collection tubes. Adapters are available for spinning 2 or 3mL vacuum blood collection tubes. Four interchangeable trunnions hold two tubes each. Features include a push-button brake, lid safety lock, built-in microhematocrit reader and see-through cover. The unit comes complete with a head, four trunnions and 200 precalibrated BD SurePrep™ capillary tubes.

#### Specifications:

Maximum capacity ..... Urine - 8 x 120mm, blood - 8 x 15mL, microhematocrit - 12 x 75mm  
Maximum speed ..... Urine - 2300rpm, blood - 3500rpm, microhematocrit - 10,400rpm  
Maximum RCF ..... Urine - 660 x g, blood - 1500 x g, microhematocrit - 12,600 x g  
Dimensions (Dia. x H x D) ..... 12 x 10 x 14 in.  
Power requirements ..... 120V, 60 Hz

| Cat. No. | Mfr. No. | Description          | Qty. |
|----------|----------|----------------------|------|
| B4389-1  | 420200   | BD Triac™ centrifuge | 1/ea |

### Model 614B Fixed-Angle Centrifuge

DRUCKER - The Model 614B fixed-angle tabletop centrifuge accommodates test tubes from 75 to 125mm in length. It features a mechanical 30 min. timer. Rotor and tube holders (6 green for 75mm tubes, 6 red for 100mm tubes and 6 black for 125mm tubes) included. Dimensions: (H x W x D) 8.5 x 11 x 12.5 in.



#### Specifications:

Power requirement ..... 120V, 60Hz, 4A  
Maximum capacity ..... 6 x 15mL  
Speed ..... 3150 rpm  
RCF ..... 1,200 x g

| Cat. No. | Mfr. No. | Description            | Qty. |
|----------|----------|------------------------|------|
| 614B     | 614B     | Fixed speed centrifuge | 1/ea |

#### Replacement tube holders

|         |         |              |      |
|---------|---------|--------------|------|
| 7713033 | 7713033 | 75mm - green | 1/ea |
| 7713031 | 7713031 | 100mm - red  | 1/ea |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### Horizon Easy-Spin Horizontal Centrifuges

**DRUCKER** - With its unique horizontal rotor and higher separation force, the Model 653ES reduces blood separation time from 15 to 10 min. The Model 653ES features a digital time display that may be easily set from 1 to 99 min. Electronic braking brings the samples to a fast controlled stop and may be disengaged for delicate samples.

An audible end-of-run indicator signals when the run is complete. Safety features include a transparent lid, a welded steel rotation chamber, a "0" rpm lid safety interlock system and an out-of-balance system. The Model 653ES includes a complete set of 2-place tube carriers designed to spin test tubes up to 17 x 100mm and 1 in. tube cushion spacers when using 75mm tubes.



Model 653V shown

The Horizon Model 653V gives you all of the advantages of the Horizon product line—easy loading, horizontal separation, small size. Its brushless DC motor provides extremely smooth operation and precise speed control. The optional fixed angle rotor (7786044) can be used to increase the maximum speed to 4,000 rpm and the capacity to six 50mL (125mm) tubes. Dimensions: (H x W x D) 9 x 12.5 x 15 in.

#### Specifications:

Power requirement ..... 120V, 60 Hz, 4A

Maximum capacity..... 12 x 10mL

#### Model 653ES

Speed ..... 3,150 rpm

RCF..... 1,500 x g

#### Model 653V

Speed ..... 500 to 3,200 rpm\*

RCF..... 40 to 1,500 x g\*

\*With standard rotor

| Cat. No.     | Mfr. No. | Description    | Qty. |
|--------------|----------|----------------|------|
| <b>653ES</b> | 653ES    | Fixed speed    | 1/ea |
| <b>653V</b>  | 653V     | Variable speed | 1/ea |

### Horizon Elite Centrifuges

**DRUCKER** - The Model 755-24 is a cost-effective, single speed 24-place centrifuge and utilizes the unique patented horizontal rotor design. Select from 2 rotors. Includes a "0" rpm safety lid lock and a mechanical cycle counter.

The Model 755V is a variable speed centrifuge that will spin up to 12 tubes (up to 17 x 125mm), with the unique patented horizontal rotor design. It has a 1/2 hp brushless DC motor for quiet, smooth operation and welded steel construction for strength and durability. The electronically controlled timer can be set from 1 to 30 min. An end-of-run alarm sounds when the rotor has stopped to indicate that the cycle is complete. Other features include electronic braking that reduces the deceleration time to about 15 sec. and a cycle counter to monitor machine usage. An automatic lid lock prevents the lid from opening while the centrifuge is in operation.

The Model 755V-24 is a variable speed centrifuge that will spin up to twenty-four 10mL tubes (up to 17 x 100mm), up to twelve 15mL tubes (up to 17 x 125mm) or six 50mL tubes with the unique patented horizontal rotor design. It has a 1/2 hp brushless DC motor for quiet, smooth operation and welded steel construction for strength and durability. The electronically controlled timer can be set from 1 to 30 min. An end-of-run alarm sounds when the rotor has stopped to indicate that the cycle is complete. Other features include electronic braking that reduces the deceleration time to about 15 sec. and a cycle counter to monitor machine usage. An automatic lid lock helps prevent the lid from opening while the centrifuge is in operation.



Model 755VES shown

The Horizon 755VES features the largest holding capacity of Drucker's Elite Series centrifuges. Its standard horizontal rotor and carriers can accommodate up to 24 test tubes. The 755VES offers control over almost every aspect of the unit's operation from variable acceleration and deceleration to easy time and speed input. The digital timer can be set from 1 to 99 min. The exclusive Drucker horizontal rotor allows for quick and easy sample loading and complete horizontal separation. Save your settings in one of 10 memory locations and recall them at the touch of a button. Dimensions: (H x W x D) 9 x 14.5 x 17 in.

#### Specifications:

Power requirement ..... 115V, 50/60 Hz, 1A

#### Maximum capacity

755-24, 755V-24 and 755VES ..... 24 x 10mL or 6 x 50mL with 6-place rotor  
755V..... 12 x 15mL with 12-place rotor

#### Speed

755-24..... 3,000 rpm

755V-24 and 755V..... 500-3,150 rpm

755VES ..... 500-4,300 rpm

#### RCF

755-24..... 1,530 x g

755V-24 ..... 1,690 x g

755V..... 1,860 x g

755VES ..... 3,160 x g

Nominal acceleration time ..... 30 sec.

Nominal deceleration time ..... 15 sec.

| Cat. No.       | Mfr. No. | Description               | Qty. |
|----------------|----------|---------------------------|------|
| <b>755-24</b>  | 755-24   | Fixed speed - 24-place    | 1/ea |
| <b>755V-24</b> | 755V-24  | Variable speed - 24-place | 1/ea |
| <b>755V</b>    | 755V-12  | Variable speed - 12-place | 1/ea |
| <b>755VES</b>  | 755VES   | High speed - 12-place     | 1/ea |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### Horizon Mini Centrifuges

DRUCKER - Designed for multipurpose separations, the Horizon models 642B, 642E and 642VES tabletop centrifuges accommodate up to 6 test tubes from 75 to 100mm in length. Features include brushless AC motor, timer and lid locking system. Rotor and tube holders included.

The Horizon Model 642B is an affordable horizontal centrifuge and uses an exclusive patented horizontal rotor. The mechanical timer is easily settable from 1 to 30 min. and a lid safety switch cuts power to the motor if the lid is opened during a run.

The Horizon Model 642E is a cost-effective horizontal centrifuge with an easy-to-use digital time control for precise spin times. The "one button" operation assures consistent and repeatable runs for perfect separation. Includes a "0" rpm safety lid lock.

The Horizon 642VES, is a variable-speed horizontal centrifuge designed for the doctor's office or small lab. The scrollable time setting and digital readout makes it easy to use while its compact design minimizes its footprint, leaving more room on your counter. Includes a "0" rpm safety lid lock, electronic braking and an audible end-of-run indicator. Dimensions (Models 642B, 642E and 642VES): (H x W x D) 8.5 x 11 x 12.5 in.



Model 642E shown

#### Specifications:

Power requirement ..... 120V, 60Hz, 4A  
Maximum capacity ..... 6 x 10mL

#### Model 642B and 642E

Speed ..... 3,380 rpm  
RCF ..... 1,600 x g

#### Model 642VES

Speed ..... 1,000 to 3,200 rpm  
RCF ..... 111 to 1,134 x g using 75mm tube holders  
139 to 1,425 x g using 100mm tube holders

| Cat. No.      | Mfr. No. | Description                     | Qty. |
|---------------|----------|---------------------------------|------|
| <b>642B</b>   | 642B     | Single speed - mechanical timer | 1/ea |
| <b>642E</b>   | 642E     | Single speed - electronic timer | 1/ea |
| <b>642VES</b> | 642VES   | Variable speed - digital timer  | 1/ea |

### Horizon Plasmafuge 6- and 12-Place Centrifuges

DRUCKER - Reduce processing times and produce platelet-poor/free plasma with these high-speed, high-force variable-speed centrifuges. They enable you to control nearly all phases of operation, including variable acceleration and deceleration. Each unit has a ½ hp brushless motor for smooth and quiet operation, welded steel construction for strength and durability and digital displays for speed and time. The timer has a hold feature and can be set from 1 to 99 min. You can set the running speed by rpm (in 50 rpm increments) or RCF on the speed control. You can also customize the variable acceleration and deceleration for each run. An end-of-run alarm sounds when the rotor has stopped. Safety features include an automatic lid lock and an out-of-balance detector. The clear lid with positive lid latching provides access for a phototachometer and enables you to safely view the rotor.



Model 842VESPP shown

Centrifuges 842VESSTND and 842VESPP are each supplied with six 100mm test tube holders, six 75mm tube holders, one 10 ft. line cord, an operator's manual and a 5/32 in. Allen wrench. Centrifuges 853VESSTND and 853VESPP are each supplied with twelve 100mm tube holders, twelve 75mm tube holders, one 10 ft. line cord, an operator's manual and twenty-four 0.25 in. cushions for glass tubes.

Choose from centrifuges with either 6- or 12-place capacity and with either standard horizontal or performance plus horizontal rotor.

#### Specifications:

Power requirements ..... 115V, 50/60 Hz, 1.7A

#### Maximum capacity

842VESPP and 842VESSTND....6 x 10mL  
853VESPP and 853VESSTND....12 x 10mL

#### Speed

842VESPP..... 1,000 to 6,500 rpm  
853VESPP..... 500 to 5,000 rpm  
842VESSTND..... 1,000 to 4,500 rpm  
853VESSTND..... 500 to 4,000 rpm

#### RCF

842VESPP..... 140 to 5,000 x g  
853VESPP..... 40 to 3,800 x g  
842VESSTND..... 140 to 2,800 x g  
853VESSTND..... 40 to 2,400 x g

Nominal acceleration time ..... 30 sec.

Nominal deceleration time ..... 15 sec.

| Cat. No.          | Mfr. No.    | Description               | Qty. |
|-------------------|-------------|---------------------------|------|
| <b>842VESPP</b>   | 842VES PP   | Variable speed - 6-place  | 1/ea |
| <b>853VESPP</b>   | 853VES PP   | Variable speed - 12-place | 1/ea |
| <b>842VESSTND</b> | 842VES STND | Variable speed - 6-place  | 1/ea |
| <b>853VESSTND</b> | 853VES STND | Variable speed - 12-place | 1/ea |

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# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### Eppendorf® Centrifuge Model 5702

EPPENDORF - The economical centrifuge for clinical and cell culture labs. With various fixed-angle and swing-bucket rotors and an extensive range of adapters, virtually all types of tubes can be used. The ventilation system of this model was specifically designed to minimize sample warming—even under constant use.

#### Product features:

- Compact footprint to fit on every lab bench
- Whisper-quiet operation to benefit your work environment
- Soft-touch, one-finger lid closure for ergonomic operation
- Low access height for easy loading and unloading
- Digital display and automatic RPM/RCF conversion for reproducible parameter settings
- Soft brake option for slow acceleration and braking optimized for cell separation by gradient centrifugation
- Key lock option to prevent accidental parameter changes
- Imbalance detection for maximum safety
- Stainless steel rotor chamber is rust-proof and easy-to-clean
- 2-year warranty



**Clinical package includes:** the centrifuge, a 4 x 100mL swing-bucket rotor with round buckets, 4 adapters for blood tubes with an outer diameter of 13mm and 4 adapters for 16mm tubes.

**Cell culture package includes:** the centrifuge, a 4 x 100mL swing-bucket rotor with round buckets, 4 adapters for 15mL conical tubes and 4 adapters for 50mL conical tubes.

#### Specifications:

Capacity ..... 4 x 100mL, 30 x 15mL

Maximum speed ..... 100-4,400 rpm

Maximum RCF ..... 3,000 x g

Dimensions (W x D x H) ..... 12½ x 16 x 9½ in.

| Cat. No.         | Mfr. No.  | Description                                   | Qty. |
|------------------|-----------|---|------|
| <b>C3514-68</b>  | 022626001 | 5702 without rotor - 120V                     | 1/ea |
| <b>C3514-475</b> | 022629883 | 5702 with 4 x 100mL swing bucket rotor - 120V | 1/ea |
| <b>226-28001</b> | 022628001 | 5702 clinical package                         | 1/ea |
| <b>226-28102</b> | 022628102 | 5702 cell culture package                     | 1/ea |

### Eppendorf® Refrigerated Centrifuge Model 5702 R and Refrigerated and Heated Model 5702 RH

EPPENDORF - Refrigerated centrifuge 5702 R was developed with the safety of your samples in mind. The compressor at the back of the centrifuge keeps the footprint small and the access height low. It is equipped with the latest innovations in cooling technology for accurate temperature control and energy efficiency. Model 5702 RH allows centrifugation under biological conditions to improve cell viability for more accurate results in downstream applications (e.g., cell transfection, IVF).

#### Product features (in addition to features listed for 5702):

- Virtually silent operation (<45 dB(A))
- 2 programming keys to store routine procedures
- FastTemp function for fast and accurate pre-cooling
- Standby cooling keeps centrifuge at programmed temperature
- ECO shut-off reduces energy consumption
- Built-in condensation drain to eliminate water accumulation
- 2-year warranty

**Clinical package includes:** the centrifuge, a 4 x 100mL swing-bucket rotor with round buckets, 4 adapters for blood tubes with an outer diameter of 13mm and 4 adapters for 16mm tubes.

**Cell culture package includes:** the centrifuge, a 4 x 100mL swing-bucket rotor with round buckets, 4 adapters for 15mL conical tubes and 4 adapters for 50mL conical tubes.

#### Specifications:

Capacity ..... 4 x 100mL, 30 x 15mL

Maximum speed ..... 100-4,400 rpm

Maximum RCF ..... 3,000 x g

Temperature range ..... -9°C to 40°C (RH: -9 to 42°C)

Dimensions (W x D x H) ..... 15 x 22.8 x 10.2 in.

| Cat. No.                             | Mfr. No.  | Description                                      | Qty. |
|--------------------------------------|-----------|--|------|
| <b>Model 5702 R and accessories</b>  |           |  |      |
| <b>226-26205</b>                     | 022626205 | 5702 R without rotor, 120V                       | 1/ea |
| <b>22629905</b>                      | 022629905 | 5702 R with 4 x 100mL swing bucket rotor - 120V  | 1/ea |
| <b>226-28012</b>                     | 022628012 | 5702 R clinical package                          | 1/ea |
| <b>226-28113</b>                     | 022628113 | 5702 R cell culture package                      | 1/ea |
| <b>Model 5702 RH and accessories</b> |           |  |      |
| <b>C3514-467</b>                     | 022626213 | 5702 RH refrigerated and heated centrifuge, 120V | 1/ea |
| <b>226-28023</b>                     | 022628023 | 5702 RH clinical package                         | 1/ea |
| <b>226-28124</b>                     | 022628124 | 5702 RH cell culture package                     | 1/ea |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### Eppendorf® Multipurpose Centrifuges 5804/5804 R and 5810/5810 R

EPPENDORF - Eppendorf centrifuges 5804/R and 5810/R offer high quality and reliability with cost-efficient solutions for your mid- to high-throughput applications—now and in the future. Whether your applications require spinning many tubes at a time or centrifugation of larger volume vessels at high speed, these multipurpose centrifuges with their variety of rotors and adapters cover virtually any application in tubes, bottles, flasks and microplates. They feature the benefits of three centrifuges in one: a high-capacity centrifuge for cell culture and clinical applications, a high-speed centrifuge for separating cell lysates and a microcentrifuge for nucleic acid purification.

#### Product features:

- Low sound level to benefit your work environment
- Low-profile design for easy loading/unloading
- Centrifuge lid with soft-touch lid closure and low opening height for stress-free lid locking
- Compact footprint saves valuable bench space
- Low lid opening height for use under shelves
- Short depth and low weight for a multipurpose centrifuge allows placement on standard laboratory benches
- 120V power supply for use on standard outlets provides maximum placement flexibility
- Compliant to international safety standards—no need to bolt the unit to the table
- Automatic rotor recognition and imbalance detection for maximum operational safety
- The user can enter speed, RCF and radius correction values
- 10 acceleration and 10 braking ramps for sensitive sample material
- Selectable program memory for up to 34 individual user programs
- 2-year warranty



### Centrifuges 5804/5804 R

These compact models are ideal for applications in deep well plates or for molecular applications in large volume tubes up to 100mL (max. 15,500 x g). The optional 4 x 100mL swing-bucket rotor adds flexibility and makes models 5804 and 5804 R winners for all low- to medium- throughput laboratories.

#### Specifications:

Capacity ..... 6 x 100mL, 4 x DWP  
Maximum speed ..... 200–14,000 rpm  
Maximum RCF ..... 20,800 x g  
Temperature range ..... -9°C to 40°C  
Dimensions (W x D x H) ..... 18 x 20 x 13 in./25 x 20 x 13 in.

### Centrifuges 5810/5810 R

These centrifuges are real workhorses for your mid- to high-throughput laboratory. Still equipped with a space-saving small footprint, they provide you high capacity for up to 4 x 500mL bottles, 28 x 50mL conical tubes or 16 x microplates—capacity you would normally find in much bigger centrifuges.

#### Specifications:

Capacity ..... 4 x 500mL, 4 x DWP  
Maximum speed ..... 200–14,000 rpm  
Maximum RCF ..... 20,800 x g  
Temperature range ..... -9°C to 40°C  
Dimensions (W x D x H) ..... 21 x 21 x 13 in./28 x 21 x 13 in.

| Cat. No.                                | Mfr. No.  | Description                           | Qty. |
|---|-----------|---------------------------------------|------|
| <b>Model 5804/5804R and accessories</b> |           |                                       |      |
| <b>226-22501</b>                        | 022622501 | 5804, without rotor, 120V             | 1/ea |
| <b>226-28034</b>                        | 022628034 | 5804 clinical package 4 x 100mL       | 1/ea |
| <b>226-28135</b>                        | 022628135 | 5804 cell culture package 4 x 100mL   | 1/ea |
| <b>226-23508</b>                        | 022623508 | 5804 R, without rotor, 115V           | 1/ea |
| <b>226-28045</b>                        | 022628045 | 5804 R clinical package 4 x 100mL     | 1/ea |
| <b>226-28146</b>                        | 022628146 | 5804 R cell culture package 4 x 100mL | 1/ea |
| <b>Model 5810/5810R and accessories</b> |           |                                       |      |
| <b>226-25004</b>                        | 022625004 | 5810, without rotor, 115V             | 1/ea |
| <b>226-28056</b>                        | 022628056 | 5810 clinical package 4 x 250mL       | 1/ea |
| <b>226-28078</b>                        | 022628078 | 5810 clinical package 4 x 500mL       | 1/ea |
| <b>226-28157</b>                        | 022628157 | 5810 cell culture package 4 x 250mL   | 1/ea |
| <b>226-28179</b>                        | 022628179 | 5810 cell culture package 4 x 500mL   | 1/ea |
| <b>226-25501</b>                        | 022625501 | 5810 R, without rotor, 115V           | 1/ea |
| <b>226-28067</b>                        | 022628067 | 5810 R clinical package 4 x 250mL     | 1/ea |
| <b>226-28089</b>                        | 022628089 | 5810 R clinical package 4 x 500mL     | 1/ea |
| <b>226-28168</b>                        | 022628168 | 5810 R cell culture package 4 x 250mL | 1/ea |
| <b>226-28180</b>                        | 022628180 | 5810 R cell culture package 4 x 500mL | 1/ea |

**Clinical package includes:** the centrifuge, a swing-bucket rotor with buckets, 4 adapters for blood tubes with an outer diameter of 13mm and 4 adapters for 16mm tubes.

**Cell Culture package includes:** the centrifuge, a swing-bucket rotor with buckets, 4 adapters for 15mL conical tubes and 4 adapters for 50mL conical tubes.

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges



### Eppendorf® MiniSpin® and MiniSpin plus™ Personal Microcentrifuges

EPPENDORF - Powerful and easy-to-use, these personal microcentrifuges are small enough so that each workstation can be equipped with a centrifuge for a wide range of molecular biology separations and quick spins. Two models are available to meet your performance requirements.

#### Product features:

- Extremely compact with exceptionally small footprint
- Deceleration and acceleration of <13 s
- Clear, easy-to-use digital display of time and speed
- Remarkably quiet operation
- Metal rotor housing
- Conform to IEC 1010-2-020 safety regulations
- Separate Short Spin button for fast, convenient quick spins
- Excellent air-flow minimizes heating—protects temperature-sensitive samples
- Lid automatically opens at the end of the run to reduce handling time
- Maintenance-free drive
- Rotor is autoclavable at 121°C, 20 min.
- Chemical-resistant inner centrifuge lid
- 2-year warranty

#### Specifications:

Capacity ..... 12 x 1.5/2.0mL  
Maximum speed ..... 13,400/14,500 rpm (MiniSpin plus™)  
Maximum RCF ..... 12,100 x g (C3514-32), 14,100 x g (C3514-33)  
Dimensions (W x D x H) ..... 8.9 x 9.4 x 4.7 in.

| Cat. No.        | Mfr. No.  | Description                                     | Qty. |
|-----------------|-----------|---|------|
| <b>C3514-32</b> | 022620100 | MiniSpin® with 12-place rotor - 120V, 60Hz      | 1/ea |
| <b>C3514-33</b> | 022620207 | MiniSpin plus™ with 12-place rotor - 120V, 60Hz | 1/ea |



### Eppendorf® Microcentrifuge 5417R

EPPENDORF - High-performance microcentrifuge 5417R spins up to 25,000 x g for quick and efficient pelletization. It is compact, easy-to-use, offers unsurpassed safety and reliability and accommodates a variety of microcentrifuge rotors.

Key features include: an easy-to-read display and simple, self-explanatory programming; short acceleration and braking times at maximum rcf and large capacity; CFC-free Fast Cool function rapidly cools the unit down to 4°C, which is also maintained during centrifugation at maximum rotational speed and standby cooling keeps the centrifuge at the required temperature.

#### Product features:

- Embossed foil keypad for simple operation
- Fast Cool function: from room temperature to 4°C in approx. 15 min.
- Short-spin function with preselected rotational speed
- The rpm or rcf settings as required (from 500 rpm in steps of 100 rpm)
- Soft key for gentle acceleration and deceleration
- Sample temperature <4°C maintained at maximum speed
- Automatic imbalance detection
- 2-year warranty

#### Specifications:

Capacity ..... 30 x 1.5/2.0mL  
Maximum speed ..... 16,400 rpm  
Maximum RCF ..... 25,000 x g  
Temperature range ..... -9°C to 40°C  
Dimensions (W x D x H) ..... 12.2 x 23.6 x 9.8 in.

| Cat. No.        | Mfr. No.  | Description                                       | Qty. |
|-----------------|-----------|---|------|
| <b>22621815</b> | 022621815 | 5417R (refrigerated) with 30 x 1.5mL rotor - 120V | 1/ea |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### Eppendorf® Microcentrifuge Model 5418

EPPENDORF - Centrifuge 5418 features 18-place capacity rotors are specifically designed for low to medium capacity in 1.5/2mL tubes and Microtainers®. Speed of up to 16,873 x g allows for standard molecular biology and clinical applications.

#### Product features:

- Compact footprint to fit on crowded lab benches
- OptiBowl® design allows for whisper-quiet operation without rotor lid to reduce handling time and benefit your work environment
- Centrifuge lid with a soft-touch closure for ergonomic operation
- Lid opens automatically at the end of the run to prevent sample warming and to allow easy access to samples
- QuickLock™ rotor lid for fast and reliable lid locking
- Rotor comes standard with an aerosol-tight lid for safe centrifugation of hazardous samples
- Large digital display and rpm/rcf conversion key for accurate and reproducible parameter settings
- FastTemp function for fast and accurate pre-cooling
- ECO shut-off reduces energy consumption
- Built-in condensation drain to eliminate water accumulation
- 2-year warranty



### Eppendorf® Microcentrifuge Model 5424

EPPENDORF - Centrifuge 5424 features 24-place capacity and speed up to 21,130 x g. Use for all modern molecular biology applications in Eppendorf and PCR tubes.

#### Product features:

- Compact footprint to fit on crowded lab benches
- OptiBowl® design allows for whisper quiet operation
- Centrifuge lid with a soft-touch closure for ergonomic operation
- Lid opens automatically at the end of the run to allow easy access to samples
- Rotor comes standard with an aerosol-tight lid for safe centrifugation of hazardous samples
- Full-digit digital display and rpm/rcf conversion key for accurate and reproducible parameter settings
- Easy accessible software features include: soft brake to protect delicate samples; adjustable end-of-run alarm; soft spin speed limitation; parameter lock; "At set RPM" function for maximum run time reproducibility
- Super fast 8 min. pre-cooling feature
- ECO shut-off reduces energy consumption
- Built-in condensation drain to eliminate water accumulation
- Available as a rotary knob or keypad version
- 2-year warranty



#### Specifications:

Capacity ..... 18 x 1.5/2.0mL  
Maximum speed ..... 14,000 rpm  
Maximum RCF ..... 16,873 x g  
Dimensions (W x D x H) ..... 8.2 x 11.8 x 8.2 in.

| Cat. No.  | Mfr. No.  | Description  | Qty. |
|-----------|-----------|--|------|
| P5063-144 | 022620304 | 5418, with 18 x 1.5/2mL aerosol-tight rotor - 120V | 1/ea |

#### Specifications:

Capacity ..... 24 x 1.5/2.0mL, 4 x PCR strips  
Maximum speed ..... 15,000 rpm  
Maximum RCF ..... 21,130 x g  
Dimensions (W x D x H) ..... 9.3 x 12.6 x 8.9 in.

| Cat. No.  | Mfr. No.  | Description                | Qty. |
|---|-----------|----------------------------|------|
| <b>All options come with 24 x 1.5/2mL aerosol-tight rotor</b> |           |                            |      |
| P5063-146   | 022620401 | 5424 - rotary knobs - 120V | 1/ea |
| P5063-148   | 022620444 | 5424 - keypad - 120V       | 1/ea |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges



### Eppendorf® Microcentrifuge Models 5430/5430 R

EPPENDORF - Unique crossover centrifuges 5430 and 5430 R combine the best features of a microcentrifuge (small footprint) and multipurpose centrifuge (versatility) in one instrument. These centrifuges spin rotors for Eppendorf® tubes and PCR strips as well as rotors for 15/50mL conical tubes, Vacutainer®, 10 to 50mL OakRidge tubes, cryo and HPLC vials and accommodate a swing bucket rotor for MTP and PCR plates.

#### Product features:

- Exceptional versatility—8 different rotors for tubes from 0.2mL to 50mL and microplates
- High centrifugation speed of up to 30,130 x g (17,500 rpm)
- Menu-driven operation with large backlit LCD display
- Saves up to 50 programs with names, 5 program keys
- Automatic rotor recognition with speed limitation
- Innovative Fast Temp pro allows for automated pre-cooling based on pre-programmable time and date.
- ECO shut-off reduces energy consumption
- Built-in condensation drain to help eliminate water accumulation
- Available as a rotary knob or keypad version
- 2-year warranty

#### Specifications:

|                              |  |
|------------------------------|--|
| Capacity .....               | 30 x 2mL, 6 x 50mL, 2x MTP             |
| Maximum speed .....          | 17,500 rpm                             |
| Maximum RCF .....            | 30,130 x g                             |
| Temperature range.....       | -11°C to 40°C (5430 R only)            |
| Dimensions (W x D x H) ..... | 13 x 16 x 9.8 in./15 x 25.2 x 11.7 in. |

| Cat. No.         | Mfr. No.  | Description   | Qty. |
|------------------|-----------|---|------|
| <b>22620511</b>  | 022620511 | 5430 - rotary knobs, with 30 x 1.5/2mL AT rotor - 120V              | 1/ea |
| <b>22620509</b>  | 022620509 | 5430 - keypad, with 30 x 1.5/2mL AT rotor - 120V                    | 1/ea |
| <b>22620572</b>  | 022620572 | 5430 - rotary knobs, with 2x MTP plate rotor - 120V                 | 1/ea |
| <b>226-20568</b> | 022620568 | 5430 - keypad, with 2x MTP plate rotor - 120V                       | 1/ea |
| <b>22620623</b>  | 022620623 | 5430 R - rotary knobs, with 30 x 1.5/2mL aerosol-tight rotor - 120V | 1/ea |
| <b>22620601</b>  | 022620601 | 5430 R - keypad, with 30 x 1.5/2mL AT rotor - 120V                  | 1/ea |
| <b>22620656</b>  | 022620656 | 5430 R - rotary knobs, with 2x MTP plate rotor - 120V               | 1/ea |
| <b>22620645</b>  | 022620645 | 5430 R - keypad, with 2x MTP plate rotor - 120V                     | 1/ea |

To order, call: 800.964.5227

[cardinalhealth.com](http://cardinalhealth.com)

### 4 x 100mL Swing-Bucket Rotor (A-4-38) for Eppendorf® Centrifuges 5702/5702 R/5702 RH

EPPENDORF - Rotor can be operated with either 100mL round buckets for tubes 1.5mL to 85/100mL or rectangular buckets for glass tubes from 5 to 25mL. Maximum speed: 4,400 rpm. Maximum RCF: 3,000 x g. Round buckets can be used with aerosol-tight caps for safe centrifugation of hazardous samples. Rotor, buckets, lids and adapters are autoclavable (121°C, 20 min).



| Cat. No.                                       | Mfr. No.  | Description   | Qty. |
|--|-----------|---|------|
| <b>Swing-bucket rotor A-4-38</b>               |           |   |      |
| <b>C3514-70</b>                                | 022639048 | Rotor A-4-38 with 4 x 100mL round buckets                 | 1/ea |
| <b>C3514-71</b>                                | 022639064 | Rotor A-4-38 without buckets                              | 1/ea |
| <b>C3512-97</b>                                | 022639081 | Bucket, 100mL round                                       | 4/pk |
| <b>C3512-96</b>                                | 022639307 | Bucket, 90mL rectangular                                  | 4/pk |
| <b>C3512-94</b>                                | 022639293 | Aerosol-tight lid for 100mL round buckets                 | 2/pk |
| <b>Adapters for A-4-38 round buckets</b>       |           |   |      |
| <b>C3512-133</b>                               | 022639102 | 5 x 2 to 7mL tubes (12.5mm diameter)                      | 2/pk |
| <b>C3512-131</b>                               | 022639242 | 4 x 2.6 to 7mL tubes (13mm diameter)                      | 2/pk |
| <b>C3512-128</b>                               | 022639269 | 4 x 4 to 10mL tubes (16mm diameter)                       | 2/pk |
| <b>C3512-129</b>                               | 022639129 | 4 x 9 to 15mL tubes (17.5mm diameter)                     | 2/pk |
| <b>C3512-126</b>                               | 022639200 | 2 x 15mL conical tube, (not compatible with lid C3512-94) | 2/pk |
| <b>C3512-121</b>                               | 022639188 | 1 x 15mL conical tubes                                    | 2/pk |
| <b>C3512-123</b>                               | 022639226 | 1 x 50mL conical tubes                                    | 2/pk |
| <b>Adapters for A-4-38 rectangular buckets</b> |           |   |      |
| <b>C3512-125</b>                               | 022639323 | 10 x 5 to 7mL tubes (13mm diameter)                       | 2/pk |
| <b>C3512-135</b>                               | 022639340 | 8 x 9mL tubes (14.5mm diameter)                           | 2/pk |
| <b>C3512-134</b>                               | 022639366 | 6 x 15mL tubes (17.5mm diameter)                          | 2/pk |
| <b>C3512-130</b>                               | 022639382 | 4 x 20mL tubes (22mm diameter)                            | 2/pk |
| <b>C3512-127</b>                               | 022639391 | 2 x 25mL tubes (25mm diameter)                            | 2/pk |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### 30 x 15mL Fixed-Angle Rotor (F-35-30-17) for Eppendorf® Centrifuges 5702/5702 R/5702 RH

EPPENDORF - Rotor for high-capacity cell culture and clinical applications (e.g., ultrafiltration columns). Spins 30 x 15mL glass/Vacutainer or 20 x 15mL conical tubes. Maximum speed: 4,400 rpm. Maximum RCF: 2,750 x g. Also accommodates twenty 16 x 125mm tubes. Rotor, buckets, lids and adapters are autoclavable (121°C, 20 min.).



C3514-73 rotor

| Cat. No.                             | Mfr. No.  | Description   | Qty. |
|--------------------------------------|-----------|---|------|
| <b>Fixed-angle rotors F-35-30-17</b> |           |   |      |
| <b>C3514-73</b>                      | 022639404 | Rotor with 30 x 15mL sleeves, includes 20 inserts for 15mL conical tubes and 30 rubber mats for glass tubes | 1/ea |
| <b>C3514-72</b>                      | 022639421 | Rotor with 10 x 15mL sleeves, includes 10 inserts for 15mL conical tubes and 10 rubber mats for glass tubes | 1/ea |

### 30 x 1.5/2.0mL Fixed-Angle Rotors (FA-45-30-11 and F-45-30-11) for Eppendorf® Centrifuges 5804/5804 R and 5810/5810 R

EPPENDORF - Microcentrifuge tube rotors are available with basic or aerosol-tight lid for safe centrifugation of hazardous samples. Maximum speed: 14,000 rpm. Maximum RCF: 20,800 x g. Rotor, lids and adapters are autoclavable (20 min., 121°C).



| Cat. No.         | Mfr. No.  | Description                                 | Qty  |
|------------------|-----------|---|------|
| <b>226-37100</b> | 022637100 | Rotor 30 x 1.5/2.0mL with aerosol-tight lid | 1/ea |
| <b>226-37002</b> | 022637002 | Rotor 30 x 1.5/2.0mL with basic lid         | 1/ea |

### 6 x 100mL Fixed-Angle Rotor (F-34-6-38) for Eppendorf® Centrifuges 5804/5804 R and 5810/5810 R

EPPENDORF - High-speed rotor for molecular applications in tubes from 0.2mL to 100mL (38mm diameter). Low-weight design (7.0 lbs./3.2 kg) for easy lifting and ergonomic carrying. The low rotor profile with domed rotor lid provides unmatched tube accessibility and trouble-free tube removal. Maximum speed: 12,000 rpm (11,000 rpm in 5804/5804R/5810). Maximum RCF: 18,500 x g (15,500 rpm in 5804/5804R/5810). Rotor, lids and adapters are autoclavable (20 min., 121°C).



| Cat. No.         | Mfr. No.  | Description              | Qty  |
|------------------|-----------|--------------------------|------|
| <b>226-37207</b> | 022637207 | Rotor 6 x 100mL with lid | 1/ea |
| <b>Adapters</b>  |           |                          |      |
| <b>226-37215</b> | 022637215 | 4 x 1.5/2.0mL tubes      | 2/pk |
| <b>2263727-4</b> | 022637274 | 1 x 15mL conical tubes   | 2/pk |
| <b>226-37266</b> | 022637266 | 1 x 50mL conical tubes   | 2/pk |

### Swing-Bucket Rotor A-2-DWP for Eppendorf® Centrifuges 5804/5804 R and 5810/5810 R

EPPENDORF - Accommodates plates up to 89mm in height. Maximum speed: 3,700 rpm. Maximum RCF: 2,250 x g. Buckets, lids and adapters are autoclavable (20 min., 121°C).



| Cat. No.        | Mfr. No.  | Description                   | Qty  |
|-----------------|-----------|-------------------------------|------|
| <b>C3514-58</b> | 022638564 | Rotor A-2-DWP, with 2 buckets | 1/ea |

### 4 x 100mL Swing-Bucket Rotor (A-4-44) for Eppendorf® Centrifuges 5804/5804 R and Centrifuges 5810/5810 R

EPPENDORF - Rotor accommodates tubes from 0.2mL to 100mL. Maximum speed: 5,000 rpm. Maximum RCF: 4,500 x g. Aerosol-tight caps for safe centrifugation of hazardous samples optionally available. Rotor, buckets, lids and adapters are autoclavable (121°C, 20 min.).



| Cat. No.         | Mfr. No.  | Description                                       | Qty. |
|------------------|-----------|---|------|
| <b>226-37401</b> | 022637401 | Rotor A-4-44 with 4 x 100mL rectangular buckets   | 1/ea |
| <b>226-37428</b> | 022637428 | Aerosol-tight lids* for 100mL rectangular buckets | 2/pk |
| <b>Adapters</b>  |           |   |      |
| <b>226-37509</b> | 022637509 | 14 x 1.2 to 5mL tubes (11mm O.D.)                 | 2/pk |
| <b>226-37541</b> | 022637541 | 9 x 1.8 to 7mL tubes (13mm diameter)              | 2/pk |
| <b>226-37568</b> | 022637568 | 7 x 4 to 10mL tubes (16mm diameter)               | 2/pk |
| <b>226-37584</b> | 022637584 | 6 x 7 to 17mL tubes (17.5mm diameter)             | 2/pk |
| <b>226-37606</b> | 022637606 | 4 x 15mL conical tubes                            | 2/pk |
| <b>C3514-55</b>  | 022637673 | 1 x 50mL conical tubes                            | 2/pk |

\*Aerosol-tightness tested and certified by the Centre of Emergency Preparedness and Response, Health Protection Agency, Porton Down, Great Britain.

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### 4 x 250mL Swing-Bucket Rotor (A-4-62) for Eppendorf® Centrifuges 5810/5810 R

EPPENDORF - Economic swing-bucket rotor A-4-62 accommodates tubes and flasks from 0.2mL to 250mL as well as plates up to 53mm height. Maximum speed: 4,000 rpm. Maximum RCF: 3,250 x g. Aerosol-tight caps for safe centrifugation of hazardous samples optionally available. Rotor, buckets, lids and adapters are autoclavable (20 min., 121°C).



| Cat. No.  | Mfr. No.  | Description                                       | Qty. |
|-----------|-----------|---|------|
| 226-38009 | 022638009 | Rotor A-4-62 with 4 x 250mL rectangular buckets   | 1/ea |
| 226-38068 | 022638068 | Bucket, 3x MTP/1x DWP                             | 4/pk |
| 226-38033 | 022638033 | Aerosol-tight lids* for 250mL rectangular buckets | 2/pk |

### 4 x 500mL Swing-Bucket Rotor (A-4-81) for Eppendorf® Centrifuges 5810/5810 R

EPPENDORF - High-capacity rotor that can handle up to 28 x 50mL conical or 48 x 15mL conical tubes as well as up to 72 x 5/7mL or 64 x 10mL blood collection tubes. Rotor A-4-81 accommodates buckets for plates up to 60mm height. Possibility for mixed loading with 2 plate buckets and 2 rectangular tube buckets allows for increased versatility. Maximum speed: 4,000 rpm. Maximum RCF: 3,250 x g. Aerosol-tight caps for safe centrifugation of hazardous samples optionally available. Buckets, lids and adapters are autoclavable (20 min., 121°C).



| Cat. No.  | Mfr. No.  | Description                                       | Qty. |
|-----------|-----------|---|------|
| C3514-444 | 022638602 | Rotor A-4-81 with 4 x 500mL rectangular buckets   | 1/ea |
| C3515-476 | 022638866 | Bucket, 4x MTP/1x DWP                             | 2/pk |
| C3515-475 | 022638840 | Bucket, 4x MTP/1x DWP                             | 4/pk |
| C3514-422 | 022638661 | Aerosol-tight lids* for 500mL rectangular buckets | 2/pk |

#### Adapters

|           |           |  |      |
|-----------|-----------|--|------|
| 22638700  | 022638700 | 25 x 1.8 to 7mL tubes (13mm diameter)    | 2/pk |
| C3512-406 | 022638726 | 16 x 7 to 17mL tubes (17.5mm diameter)   | 2/pk |
| C3512-403 | 022638742 | 12 x 15mL conical tubes                  | 2/pk |
| C3514-423 | 022638769 | 5 x 50mL conical tubes                   | 2/pk |
| C3512-417 | 022638921 | 1 x 180 to 250mL bottles (62mm diameter) | 2/pk |

\*Aerosol-tightness tested and certified by the Centre of Emergency Preparedness and Response, Health Protection Agency, Porton Down, Great Britain.

| Cat. No.        | Mfr. No.  | Description                            | Qty. |
|-----------------|-----------|--|------|
| <b>Adapters</b> |           |  |      |
| 226-38203       | 022638203 | 25 x 1.2 to 5mL tubes (11mm O.D.)      | 2/pk |
| 226-38246       | 022638246 | 15 x 1.8 to 7mL tubes (13mm diameter)  | 2/pk |
| 226-38262       | 022638262 | 12 x 4 to 10mL tubes (16mm diameter)   | 2/pk |
| 226-38301       | 022638301 | 12 x 7 to 17mL tubes (17.5mm diameter) | 2/pk |
| 226-38289       | 022638289 | 9 x 15mL conical tubes                 | 2/pk |
| 226-38351       | 022638351 | 4 x 50mL conical tubes**               | 2/pk |
| 226-38343       | 022638343 | 3 x 50mL conical tubes                 | 2/pk |

\*Aerosol-tightness tested and certified by the Centre of Emergency Preparedness and Response, Health Protection Agency, Porton Down, Great Britain.

\*\*Adapter cannot be used with aerosol-tight cap

### Rotor FA-45-18-11 Kit for use in Eppendorf® Microcentrifuge 5424 / 5424 R

EPPENDORF - Innovative 18-place rotor for mini-prep spin columns and 1.5/2.0mL tubes. Designed with an extra-high rim to support open tube lids during centrifugation—no more torn-off lids. Maximum speed: 15,000 rpm. Maximum RCF: 18,111 x g.



| Cat. No.  | Mfr. No.  | Description                               | Qty. |
|-----------|-----------|---|------|
| P5063-156 | 022653083 | Rotor FA-45-18-11-kit, includes rotor lid | 1/ea |



### Rotors for use in Eppendorf® Microcentrifuges 5430 and 5430 R

EPPENDORF

| Cat. No.  | Mfr. No.  | Description                                   | Qty. |
|-----------|-----------|---|------|
| 226-54047 | 022654047 | 30 x 1.5/2mL aerosol-tight                    | 1/ea |
| 226-54004 | 022654004 | 30 x 1.5/2mL                                  | 1/ea |
| 226-54080 | 022654080 | 24 x 1.5/2mL aerosol-tight high-speed rotor   | 1/ea |
| 226-54128 | 022654128 | 24x MiniPrep kit (or 1.5/2mL tubes)           | 1/ea |
| 226-54403 | 022654403 | 2x MTP plate rotor (plates up to 29mm height) | 1/ea |
| 226-54306 | 022654306 | 6 x 15/50mL conical rotor including adapter   | 1/ea |
| 226-54161 | 022654161 | 18 x cryo tube rotor, including adapter       | 1/ea |
| 226-54209 | 022654209 | 8 x 8-tube PCR strip rotor                    | 1/ea |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### Eppendorf® Microcentrifuge Tube Racks

EPPENDORF - These racks, ideal for sample processing and the short- or medium-term storage of samples, can be stored in a freezer and withstand temperatures as low as -80°C. Each tube is properly spaced and elevated for easy access and convenient handling.

Tube racks are available for 0.5mL, 1.5mL and 2.0mL tubes. They can be stacked, even when fully loaded, interlocked to other racks on both sides and feature labeling surfaces to enable easy identification. The racks are UV-resistant and fully autoclavable.



| Cat. No. | Mfr. No.  | Description          | Qty. |
|----------|-----------|----------------------|------|
| C3514-28 | 022364243 | 24 x 0.5mL tubes     | 1/ea |
| C3514-26 | 022364227 | 24 x 1.5/2.0mL tubes | 1/ea |

### Eppendorf® PCR Plate Adapter for Plate Buckets

EPPENDORF - Safe centrifugation of PCR plates (skirted, unskirted and semiskirted). For use in all MTP and DWP rotors. Optimized bores for most commonly available PCR plates.



| Cat. No.  | Mfr. No.  | Description       | Qty. |
|-----------|-----------|-------------------|------|
| 226-38947 | 022638947 | 96-well PCR plate | 2/pk |

### VanGuard Model V6500 Constant Speed Centrifuge

HAMILTON BELL - Ideal for use in diagnostic, clinical, biology and chemistry labs and physicians' offices, this centrifuge features a constant speed motor and electronics built for smooth performance and reliability. The centrifuge incorporates a fixed-angle design which offers optimum and efficient separation of blood and materials of varying densities and high deposition rates. With the transparent polycarbonate cover closed, the unit provides aerosol and splash protection and allows you to view the tubes. The power automatically shuts off when the cover is opened. The unit's structural foam housing and polycarbonate cover are secured to a steel base. UL listed. Motor meets CSA standards.



#### Specifications:

Maximum capacity.....6 x 15mL  
Maximum speed .....3400 rpm ( $\pm 100$ )  
Maximum RCF .....1318 x g  
Timer range.....0 to 60 min.  
Dimensions (H x W x D) .....9 x 11 x 12 in.

| Cat. No. | Mfr. No. | Description                    | Qty. |
|----------|----------|--------------------------------|------|
| V6500    | V6500    | V6500 centrifuge - 110V, 60 Hz | 1/ea |

### Hettich EBA™ 20 Benchtop Centrifuge

HETTICH - The Hettich EBA™ 20 is ideal for a small quantity of samples and laboratories with limited bench space. It is a small, non-refrigerated clinical benchtop centrifuge. The compact, microprocessor-controlled centrifuge is supplied with an 8-place angle rotor. It accepts a variety of centrifuge tubes up to a volume of 15mL.



#### Specifications:

Maximum capacity.....8 x 15mL  
Maximum speed .....6,000 rpm  
Maximum RCF .....3,461 x g  
Dimensions (H x W x D) .....8½ x 9 x 11½ in.

| Cat. No.   | Mfr. No. | Description          | Qty. |
|------------|----------|----------------------|------|
| C862120020 | 2002-01  | Model 20 - 115V 60Hz | 1/ea |

### Hettich EBA™ 20S Benchtop Centrifuge

HETTICH - The Hettich EBA™ 20S is a high-speed benchtop clinical centrifuge offering a 3 min. spin for STAT, platelet-poor plasma and coagulation samples. The EBA™ 20S comes standard with a metal lid lock adding extra protection to help ensure user safety at higher speeds. A quick-entry, easy-to-read, digital display with impulse key for short centrifugation complements this easy-to-use, fast, compact centrifuge. The 13 x 75mm tube adapters are included.



#### Specifications:

Maximum capacity.....8 x 15mL  
Maximum speed .....8,000 rpm  
Maximum RCF .....6,153 x g  
Dimensions (H x W x D) .....8½ x 9 x 11½ in.

| Cat. No.   | Mfr. No. | Description           | Qty. |
|------------|----------|-----------------------|------|
| C8621-6342 | 2080-01  | Model 20S - 115V 60Hz | 1/ea |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### Hettich EBA™ 21 Benchtop Centrifuges and Rotors

HETTICH - This basic economy benchtop centrifuge is ideal for standard and conical tubes. Designed for blood and serology uses. Applications include microliter tubes, round-bottom tubes up to 50mL, conical tubes up to 50mL, blood tubes up to 10mL and hematocrit capillaries. Includes metal housing and lid lock. Multiple rotors are available separately.



#### Specifications:

|                             |                        |
|-----------------------------|------------------------|
| Maximum capacity.....       | 6 x 50mL               |
| Maximum speed.....          | 18,000 rpm             |
| Maximum RCF .....           | 25,718 x g             |
| Dimensions (H x W x D)..... | 9 1/4 x 10.82 x 13 in. |

| Cat. No.    | Mfr. No. | Description          | Qty. |
|-------------|----------|----------------------|------|
| C8621-10040 | 1004-01  | 110-115V, 50-60Hz    | 1/ea |
| C8621-10043 | 1004-31  | 110V, raised display | 1/ea |

#### Rotors

|            |      |  |      |
|------------|------|--|------|
| C8621-1116 | 1116 | 6 x 50mL angle rotor with buckets - max. RCF: 3,904 x g        | 1/ea |
| C8621-1118 | 1118 | 12 x 5mL/7mL angle rotor for decanting - max. RCF: 2,879 x g   | 1/ea |
| C8621-1416 | 1416 | 12 x 15mL angle rotor - max. RCF: 4,146 x g                    | 1/ea |
| C8621-1450 | 1450 | 24-place hematocrit rotor with lid - max. RCF: 21,382 x g      | 1/ea |
| C8621-1115 | 1115 | 6-place swing-out rotor without buckets - max. RCF: 2,711 x g  | 1/ea |
| C8621-1120 | 1120 | 8-place swing-out rotor without buckets - max. RCF: 2,879 x g  | 1/ea |
| C8621-1126 | 1126 | 12-place swing-out rotor without buckets - max. RCF: 2,963 x g | 1/ea |

#### Accessories

|            |      |   |          |
|------------|------|---|----------|
| C8621-1071 | 1071 | 1.4 x 75mm capillary tubes - heparinized, self-sealing, Mylar®-coated | 2,000/bx |
| C8621-1123 | 1123 | Bucket for rotor 1115   | 1/ea     |
| C8621-1127 | 1127 | Bucket for 1126 rotor, 2mL - 5mL blood tubes                          | 1/ea     |

### Hettich EBA™ 270 Tabletop Centrifuge

HETTICH - The Hettich EBA™ 270 is a compact tabletop centrifuge for the clinical laboratory. Features an easy-to-read, multi-view digital display. The centrifuge comes pre-packaged with a built-in 90° horizontal rotor for blood and round bottom tubes up to 15mL. Engineered to be quiet, reliable and safe with Run-Silent™ operation (<60dB). Includes auto-imbalance detection and shut-off.



#### Specifications:

|                             |                         |
|-----------------------------|-------------------------|
| Maximum capacity.....       | 6 x 15mL                |
| Maximum speed.....          | 4,000 rpm               |
| Maximum RCF .....           | 2,254 x g               |
| Dimensions (H x W x D)..... | 9.4 x 12.83 x 15.31 in. |
| Power requirements .....    | 100-115V 50-60Hz        |

| Cat. No.   | Mfr. No. | Description  | Qty. |
|------------|----------|--|------|
| C8622-6378 | 2300-01  | Centrifuge with rotor and 10mL, 15mL tube carriers | 1/ea |

### Hettich Hematocrit 210 Benchtop Centrifuge

HETTICH - This centrifuge is designed for quick and easy hematocrit determination. This centrifuge features a standstill indicator, an imbalance switch-off, motor overheating protection and an emergency lid-lock release. The easy-to-use keypad has a digital display that shows the current parameter values. You can change the rpm in increments of 100 and the running time in minutes. Centrifuge is supplied without a rotor. Choose 24-place rotor C8621-2076 for standard capillaries. Capillaries are secured in separate chambers and are supported by an easy-to-clean, disposable holding tray that can hold glass shards and leakage in case a tube breaks.



#### Specifications:

|                             |                     |
|-----------------------------|---------------------|
| Maximum capacity.....       | 24 capillaries      |
| Maximum speed.....          | 13,000 rpm          |
| Maximum RCF .....           | 16,060 x g          |
| Dimensions (H x W x D)..... | 9 1/4 x 11 x 13 in. |

| Cat. No.    | Mfr. No. | Description                        | Qty. |
|-------------|----------|------------------------------------|------|
| C8621-21040 | 2104-01  | Centrifuge - 100-127V, 50-60Hz     | 1/ea |
| C8621-2076  | 2076     | Hematocrit rotor 24-place with lid | 1/ea |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### Hettich MIKRO™ 120 Benchtop Centrifuge

HETTICH - A compact and dependable microcentrifuge requiring very little bench space. The small, powerful Hettich MIKRO™ 120 offers a 24-place rotor for microliter tubes making it the perfect tabletop centrifuge for all your research applications. Includes auto-imbalance detection shut-off, metal lid-lock assembly and motor overheating protection.



#### Specifications:

Maximum capacity ..... 24 x 1.5/2.0mL  
Maximum speed ..... 14,000 rpm  
Maximum RCF ..... 18,626 x g  
Dimensions (H x W x D) ..... 8 x 9 x 11½ in.  
Power requirements ..... 115V

| Cat. No.          | Mfr. No. | Description                               | Qty. |
|-------------------|----------|---|------|
| <b>C862112040</b> | 1204-01  | 120 microliter centrifuge                 | 1/ea |
| <b>Rotors</b>     |          |   |      |
| <b>C8622-6354</b> | 1242     | 24-place angle rotor for microliter tubes | 1/ea |
| <b>Adapters</b>   |          |   |      |
| <b>C8621-2024</b> | 2024     | Adapter for Beckman & PCR 0.2–0.4mL tubes | 1/ea |
| <b>C8621-2023</b> | 2023     | Adapter for BD Microtainer® 0.5–0.8mL     | 1/ea |
| <b>C8621-2031</b> | 2031     | Adapter for 1.5mL micro tube              | 1/ea |

### Hettich MIKRO™ 200/200R Benchtop Centrifuges

HETTICH - The Hettich MIKRO™ 200 and MIKRO™ 200R microliter centrifuges perform research centrifugation tasks such as PCR, DNA and RNA easily and effectively. The Fast Cool Function refrigerates quickly down to +4°C in 10 to 15 min., making the MIKRO™ 200R microcentrifuge ideal for the fast-paced laboratory. Highly reliable refrigeration helps ensure that even temperature-sensitive samples are centrifuged correctly.

#### Specifications:

Maximum capacity ..... 30 x 0.2–2.0mL  
Maximum speed ..... 15,000 rpm  
Maximum RCF ..... 21,382 x g  
Power requirements ..... 110V-115V/50-60Hz

#### C862124000 (MIKRO™ 200)

Dimensions (H x W x D) ..... 10¼ x 10¾ x 13½ in.

#### C862124050 (MIKRO™ 200R)

Temperature control ..... -10°C to +40°C

Dimensions (H x W x D) ..... 10¼ x 11 x 21½ in.

| Cat. No.          | Mfr. No. | Description                               | Qty. |
|-------------------|----------|---|------|
| <b>C862124000</b> | 2400-01  | MIKRO™ 200 model                          | 1/ea |
| <b>C862124050</b> | 2405-01  | MIKRO™ 200R refrigerated model            | 1/ea |
| <b>Rotors</b>     |          |   |      |
| <b>C8622-6349</b> | 2424-B   | 24-place fixed angle rotor                | 1/ea |
| <b>C8622-6351</b> | 2427-A   | 30-place fixed angle rotor                | 1/ea |
| <b>C8622-6350</b> | 2426-B   | 20-place fixed angle rotor for cryo tubes | 1/ea |
| <b>C8622-6348</b> | 2418-A   | 4-place angle rotor for PCR strips        | 1/ea |

### Hettich MIKRO™ 220/220R Benchtop Centrifuges

HETTICH - The Hettich MIKRO™ 220 and MIKRO™ 220R are advanced microcentrifuges requiring very little bench space for such diverse tabletop centrifuges. The MIKRO™ 220 is ideal for microliter tubes required for PCR, DNA and RNA applications. The MIKRO™ 220R can also accommodate blood tubes, conical tubes and round-bottom centrifuge tubes up to 50mL.

#### Specifications:

Drum rotor capacity ..... 60 x 1.5–2.0mL  
Maximum speed ..... 18,000 rpm  
Maximum RCF ..... 31,514 x g

#### C862122000 (MIKRO™ 220)

Fixed angle capacity ..... 48 x 0.2–2.0mL

Dimensions (H x W x D) ..... 12½ x 13 x 16½ in.

#### C862122051 (MIKRO™ 220R)

Fixed angle capacity ..... 48 x 0.2–2.0mL and 6 x 50mL

Temperature control ..... -20°C to +40°C

Dimensions (H x W x D) ..... 12½ x 13 x 25½ in.

| Cat. No.          | Mfr. No. | Description                                  | Qty. |
|-------------------|----------|--|------|
| <b>C862122000</b> | 2200-01  | MIKRO™ 220 model - 120V                      | 1/ea |
| <b>C862122051</b> | 2205-01  | MIKRO™ 220R refrigerated model - 120V        | 1/ea |
| <b>Rotors</b>     |          |  |      |
| <b>C8621-1015</b> | 1015     | 12 x 15mL angle rotor for MIKRO™ 220R        | 1/ea |
| <b>C8622-6346</b> | 1195-A   | 24-place angle rotor with aerosol lid        | 1/ea |
| <b>C86211158L</b> | 1158-L   | 48-place swing-out rotor                     | 1/ea |
| <b>C86211154L</b> | 1154-L   | 24-place swing-out rotor for 0.2–2.0mL tubes | 1/ea |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges



### Hettich Rotanta 460/460R Benchtop Centrifuges

HETTICH - Hettich Rotanta 460/460R benchtop centrifuges offer enhanced performance with an extended range of accessories that help guarantee fast, trouble-free operation in daily laboratory use. Features special braking ramp for spinning blood bags. With a maximum capacity of 3L per run, the Hettich Rotanta 460/460R tabletop centrifuges are designed for clinics and laboratory centers, as well as in life science R & D laboratories.

In addition to standard tubes, the Rotanta 460 also accommodates a large variety of specialty applications such as blood bags, cytology, plates, chrome bath and schlenk tubes. Available in non-refrigerated (460) and refrigerated (460R) versions.

#### Specifications:

|                          |               |
|--------------------------|---------------|
| Maximum capacity.....    | 4 x 750mL     |
| Maximum speed.....       | 15,000 rpm    |
| Maximum RCF .....        | 24,400 x g    |
| Power requirements ..... | 110–115V 60Hz |

#### C8622-6374 (Rotanta 460)

Dimensions (H x W x D).....18 x 21½ x 28 in.

#### C8622-6375 (Rotanta 460R)

Temperature control .....-20°C to +40°C

Dimensions (H x W x D).....18 x 30¼ x 28 in.

| Cat. No.                      | Mfr. No. | Description                              | Qty. |
|-------------------------------|----------|--|------|
| <b>C8622-6374</b>             | 5650-01  | Rotanta 460 model                        | 1/ea |
| <b>C8622-6375</b>             | 5660-01  | Rotanta 460R refrigerated model          | 1/ea |
| <b>Adapters</b>               |          |  |      |
| <b>C8621-5647</b>             | 5647     | Adapter for 50mL conical tube            | 1/ea |
| <b>C8621-4832</b>             | 4832     | Adapter for 13 x 75mm tubes (1.6–5mL)    | 1/ea |
| <b>C8621-4833</b>             | 4833     | Adapter for 13/16 x 100mm tubes (4–10mL) | 1/ea |
| <b>Rotor</b>                  |          |  |      |
| <b>C8621-5624</b>             | 5624     | 4-place swing-out rotor                  | 1/ea |
| <b>Bucket and accessories</b> |          |  |      |
| <b>C8622-6370</b>             | 5620-A   | Bucket for 5624 rotor                    | 1/ea |
| <b>C8621-5621</b>             | 5621     | Bio-containment lid for 5624 bucket      | 1/ea |



### Hettich Rotina™ 380/380R Benchtop Centrifuges

HETTICH - The Hettich Rotina™ 380 and Rotina™ 380R benchtop centrifuges save you space while spinning a large quantity of centrifuge tubes per run. Both a research and clinical centrifuge, the Rotina™ 380 tabletop centrifuge can handle a variety of specialty applications such as cytology, cell culture flasks and plates. Available in non-refrigerated (380) and refrigerated (380R) versions.

#### Specifications:

|                          |            |
|--------------------------|------------|
| Maximum capacity.....    | 4 x 290mL  |
| Maximum speed.....       | 15,000 rpm |
| Maximum RCF .....        | 24,400 x g |
| Power requirements ..... | 115V       |

#### C8621-6347 (Rotina™ 380)

Dimensions (H x W x D).....16 x 18 x 23½ in.

#### C8621-6348 (Rotina™ 380R)

Temperature control .....-20°C to +40°C

Dimensions (H x W x D).....16 x 18 x 29½ in.

| Cat. No.          | Mfr. No. | Description                     | Qty. |
|-------------------|----------|---------------------------------|------|
| <b>C8621-6347</b> | 1701-01  | Rotina™ 380 model               | 1/ea |
| <b>C8621-6348</b> | 1706-01  | Rotina™ 380R refrigerated model | 1/ea |

#### Swing-out rotors

|                   |      |                             |      |
|-------------------|------|-----------------------------|------|
| <b>C8621-6349</b> | 1754 | 4-place swing-out rotor     | 1/ea |
| <b>C8621-1798</b> | 1798 | 4-place rotor               | 1/ea |
| <b>C8621-1726</b> | 1726 | 6-place rotor (no buckets)  | 1/ea |
| <b>C8621-1717</b> | 1717 | 10-place, 50mL Falcon tubes | 1/ea |

#### Bucket and accessories

|                   |        |  |      |
|-------------------|--------|--|------|
| <b>C8621-6350</b> | 1752   | Round bucket for 1754 rotor                      | 1/ea |
| <b>C8621-6353</b> | 1762   | Adapter for bucket 1752, for 12 x 75/100mm tubes | 1/ea |
| <b>C8621-6361</b> | 1771-A | Adapter for bucket 1752, for 15mL conical tubes  | 1/ea |
| <b>C8621-6362</b> | 1772-A | Adapter for bucket 1752, for 50mL conical tubes  | 1/ea |
| <b>C8621-6351</b> | 1751   | Lid for bio-containment for 1752 bucket          | 1/ea |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges



### Hettich Rotina™ 420/420R Benchtop Centrifuges

HETTICH - Hettich Rotina™ 420/420R high-performance benchtop centrifuges are designed for large volumes, yet are not overly large in size. The compact, 2L benchtop centrifuges are designed for high sample throughput as well as for high sample volumes. Features noise-dampening technology, self-diagnostic testing and one multi-functional rotor for spinning tubes, bottles and plates. With a maximum capacity of 4 x 600mL, 140 blood collection tubes, 52 x 15mL conical tubes or 16 microtitre plates, the Rotina™ 420 and Rotina™ 420R refrigerated centrifuges are ideal for applications in clinical chemistry, biotechnology and life science research facilities. Available in non-refrigerated (420) and refrigerated (420R) versions.

#### Specifications:

Maximum capacity ..... 4 x 600mL  
Maximum speed ..... 15,000 rpm  
Maximum RCF ..... 24,400 x g  
Power requirements ..... 115V

#### C862147010 (Rotina™ 420)

Dimensions (H x W x D) ..... 16.6 x 20 x 25½ in.

#### C862147060 (Rotina™ 420R)

Temperature control ..... -20°C to +40°C

Dimensions (H x W x D) ..... 16.6 x 28 x 25.7 in.

| Cat. No.   | Mfr. No. | Description                     | Qty. |
|------------|----------|---------------------------------|------|
| C862147010 | 4701-01  | Rotina™ 420 model               | 1/ea |
| C862147060 | 4706-01  | Rotina™ 420R refrigerated model | 1/ea |

#### Rotors

|            |      |                         |      |
|------------|------|-------------------------|------|
| C8621-4723 | 4723 | 4-place swing-out rotor | 1/ea |
| C8621-4795 | 4795 | 4-place angle rotor     | 1/ea |

#### Adapters

|            |      |                          |      |
|------------|------|--------------------------|------|
| C8621-4762 | 4762 | 4-7mL, 13 x 100mm        | 1/pk |
| C8621-4763 | 4763 | 4-15mL, 16 x 100mm       | 1/pk |
| C8621-4764 | 4764 | 25/30mL, round/skirt     | 1/pk |
| C8621-4765 | 4765 | 50/75mL round bottom     | 1/pk |
| C8621-4769 | 4769 | 15mL conical             | 1/pk |
| C8621-4770 | 4770 | 50mL round/conical/skirt | 1/pk |
| C8621-4771 | 4771 | 250mL, 61 x 122mm        | 1/pk |
| C8621-4775 | 4775 | 13 x 75/100mm            | 1/pk |

#### Bucket and accessories

|            |      |                                     |      |
|------------|------|-------------------------------------|------|
| C8621-4750 | 4750 | Round bucket for 4723 rotor         | 1/ea |
| C8621-4751 | 4751 | Lid, biocontainment for 4750 bucket | 1/ea |

### Hettich Roto Silenta 630RS Floor Standing Centrifuge

HETTICH - The Hettich Roto Silenta 630RS offers quiet and smooth operation designed for high throughput in the blood bank. The Roto Silenta has a non-wind shielded rotor for best sample temperature control and provides up to a 120g imbalance allowance per run. The Hettich Roto Silenta 630 RS floor standing centrifuge guarantees best separating results with blood bags, bottles up to 2,000mL, tubes and blood collection tubes. Every commercial blood bag system can be accommodated. Loading the carriers and inserts is convenient and easy. The control panel features a quick entry keypad, easy-to-read multi-view digital display, control panel lock with key and an optional bidirectional serial interface, optional barcode reader and optional Hettinfo software package.

#### Specifications:

Maximum capacity ..... 6 x 2,000mL  
Maximum speed ..... 4,500 rpm  
Maximum RCF ..... 6,520 x g  
Temperature control ..... -20°C to +40°C  
Dimensions (H x W x D) ..... 38¼ x 32 x 40 in.  
Power requirements ..... 208V, 3 phase, 60Hz

| Cat. No.   | Mfr. No. | Description                             | Qty. |
|------------|----------|---|------|
| C8621-6320 | 5005-08  | Roto Silenta 630RS floor standing model | 1/ea |

#### Rotors

|            |        |                         |      |
|------------|--------|-------------------------|------|
| C8621-4176 | 4176   | 6-place swing-out rotor | 1/ea |
| C8621-4524 | 4524-A | Bucket for 4176 rotor   | 1/ea |

#### Adapter

|            |      |  |      |
|------------|------|--|------|
| C8621-4516 | 4516 | Adapter for quad blood bags                | 1/ea |
| C8621-4525 | 4525 | Adapter for 500mL quadruplicate blood bags | 1/ea |

#### Bucket

|            |      |                                  |      |
|------------|------|----------------------------------|------|
| C8621-4523 | 4523 | Metal bucket for quad blood bags | 1/ea |
|------------|------|----------------------------------|------|

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### Hettich Rotofix™ 32A Benchtop Centrifuge

HETTICH - The Hettich Rotofix™ 32A is a rugged general-purpose benchtop centrifuge ideal for routine laboratory tasks including clinical, research, medical and industrial.

A variety of swing-out and fixed angle rotors are available, as well as a complete cytology system with up to 12 slide carriers. The Rotofix™ 32A comes standard with a solid metal housing and metal lid locks for extra protection to help ensure durability and user safety.



### Hettich Universal™ 320/320R Benchtop Centrifuges

HETTICH - The Hettich Universal™ 320 and Hettich Universal™ 320R benchtop centrifuges provide excellent performance and a comprehensive range of accessories. The Universal™ 320/320R features noise-dampening technology and can be used for both standard and special applications. Not only are the benchtop centrifuges cost-effective, they also save valuable space in the laboratory.

You can program the Hettich Universal™ 320 to automatically sound and open the lid when centrifugation is finished. A quick glance from across the lab lets you know its ready to go. The Hettich Universal™ 320 has a short centrifugation impulse key that allows you to perform quick spins when a full cycle isn't necessary. The Universal™ 320R refrigerated centrifuge offers a fast cool function that will bring the unit to +4°C in 10 to 15 min. Saves you valuable time when spinning delicate samples.

#### Specifications:

Maximum capacity ..... 4 x 100mL or 32 x 15mL  
Maximum speed ..... 15,000 rpm  
Maximum RCF ..... 21,382 x g  
Power requirements ..... 115V

#### C862114010 (Universal™ 320)

Dimensions (H x W x D) ..... 13½ x 15½ x 20½ in.

#### C862114060 (Universal™ 320R)

Temperature control ..... -20°C to +40°C

Dimensions (H x W x D) ..... 13½ x 15¾ x 27¼ in.

#### Specifications:

Maximum capacity ..... 4 x 100mL or 32 x 15mL  
Maximum speed ..... 6,000 rpm  
Maximum RCF ..... 4,226 x g  
Dimensions (H x W x D) ..... 10 x 14½ x 17 in.  
Power requirements ..... 115V

| Cat. No.        | Mfr. No. | Description                             | Qty. |
|-----------------|----------|---|------|
| C862112060      | 1206-01  | Rotofix™ 32A benchtop centrifuge        | 1/ea |
| <b>Rotors</b>   |          |   |      |
| C8621-1613      | 1613     | 12-place fixed angle rotor              | 1/ea |
| C8621-1324      | 1324     | 4-place swing-out rotor                 | 1/ea |
| <b>Bucket</b>   |          |   |      |
| C8621-1398      | 1398     | Bucket for 1324 rotor                   | 1/ea |
| <b>Adapters</b> |          |   |      |
| C8622-6344      | 1486     | Adapter for 13 x 75/100mm tubes 1.6–7mL | 1/ea |

| Cat. No.        | Mfr. No. | Description   | Qty. |
|-----------------|----------|---|------|
| C862114010      | 1401-01  | Universal™ 320 model  | 1/ea |
| C862114060      | 1406-06  | Universal™ 320R refrigerated model                          | 1/ea |
| <b>Rotors</b>   |          |   |      |
| C8621-1460      | 1460     | 2-place swing-out for microtitration plates                 | 1/ea |
| C8621-1615      | 1615     | 12-place 15mL angle rotor                                   | 1/ea |
| C8621-1324      | 1324     | 4-place swing-out rotor                                     | 1/ea |
| C8621-1494      | 1494     | 4-place swing-out rotor                                     | 1/ea |
| C8621-1624      | 1624     | 4-place swing-out rotor, 90° angle                          | 1/ea |
| C8621-1619      | 1619     | 6-place rotor for 50mL Falcon with buckets                  | 1/ea |
| C8621-1611      | 1611     | 8-place swing-out rotor, 90° angle                          | 1/ea |
| C8621-1617      | 1617     | 8-place swing out rotor, 45° angle 50mL Falcon with buckets | 1/ea |
| C86211620A      | 1620A    | 6-place fixed angle with buckets                            | 1/ea |
| C8621-1418      | 1418     | 8-place fixed angle for 15mL and 50mL                       | 1/ea |
| C8621-1613      | 1613     | 12-place fixed angle rotor                                  | 1/ea |
| <b>Buckets</b>  |          |   |      |
| C8621-1425      | 1425     | Bucket for 1494 rotor                                       | 1/ea |
| C8621-1398      | 1398     | Bucket for 1324 rotor                                       | 1/ea |
| <b>Adapters</b> |          |   |      |
| C8621-1441      | 1441     | Adapter for 16 x 75/100mm tubes (4–10mL)                    | 1/ea |
| C8621-1438      | 1438     | Adapter for 13 x 75/100mm tubes (1.6–7mL)                   | 1/ea |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges



### Hettich Cyto-System Rotors and Accessories

HETTICH - Choose the Hettich Cyto-System for fast and economical single layer slide preparation. The cytology clip rotors allow you to perform multiple applications in the same centrifuge. You no longer need a dedicated cyto centrifuge for a single application.

The Hettich Cyto-System fits into the Rotofix™ 32A and Universal™ 320 for spinning cytology clips and funnels, microliter tubes, 15mL and 50mL conical tubes, blood tubes, urine tubes and plates.

| Cat. No.                         | Mfr. No. | Description                   | Qty.  |
|----------------------------------|----------|-------------------------------|-------|
| <b>Standard clip rotors</b>      |          |                               |       |
| <b>C8621-6372</b>                | 7010     | 4-place with clips            | 1/ea  |
| <b>C8621-6373</b>                | 7011     | 8-place with clips            | 1/ea  |
| <b>C8621-6374</b>                | 7012     | 12-place with clips           | 1/ea  |
| <b>Quick release clip rotors</b> |          |                               |       |
| <b>C8621-6394</b>                | 7013     | 4-place with clips            | 1/ea  |
| <b>C8621-6396</b>                | 7015     | 12-place with clips           | 1/ea  |
| <b>Accessories</b>               |          |                               |       |
| <b>C8621-6377</b>                | 7110     | Single disposable cell funnel | 50/ea |
| <b>C8621-6382</b>                | 7131     | Single circle coated slides   | 50/ea |



### CenSlide® 2000 Centrifuge System

IRIS SAMPLE PROCESSING - The CenSlide® 2000 closed centrifuge system controls inherent variations in microscopic examination by standardizing urine sediment volume, centrifuge conditions and technique while significantly reducing total time for analysis. It is microprocessor-controlled to automatically spin tubes at a preset speed for 1 min. At the end of the cycle, the urine sediment is distributed evenly across the viewing area for microscopic analysis. Includes a remote universal power supply.

CenSlide® tube is both a centrifuge tube and a microscope slide in one, eliminating the need for slides, coverslips and specimen transfer. When centrifugation is complete, the 5mL tube is ready for analysis. The StakRak® transport, storage and filling station for CenSlide® tube accommodates up to 12 tubes. The CenSlide® microscope stage tube holder keeps tube in place on microscope, allowing for easy viewing. CE marked.

| Cat. No.                     | Mfr. No.   | Description  | Qty.     |
|------------------------------|------------|--|----------|
| <b>B8900-69</b>              | 2C-9000-22 | Centrifuge system  | 1/ea     |
| <b>Accessories</b>           |            |  |          |
| <b>B8900-70</b>              | 2C-2000012 | Tube with cap  | 120/bx   |
| <b>B8900-71</b>              | 2C-2000240 | Tube with cap  | 2,400/cs |
| <b>B8900-72</b>              | 2C-3000001 | Tube station   | 1/ea     |
| <b>B8900-73</b>              | 2C-5600001 | Tube holder  | 2/pk     |
| <b>Microscopic objective</b> |            |  |          |
| <b>B8900-74</b>              | 2C-494000  | Short with long working distance - use with American Optical microscopes | 1/ea     |
| <b>B8900-75</b>              | 2C-495000  | Long working distance - use with non-American Optical microscopes        | 1/ea     |

Keeping pace with today's lab.



# Centrifuges and Accessories

## Centrifuges/Microcentrifuges



### CritSpin® Microhematocrit Centrifuge System

IRIS SAMPLE PROCESSING - This microhematocrit provides complete cell packing with a preset 2 min. spin cycle, high-intensity fiber-optic light to tubes while in the rotor and optional digital reader that simplifies tube reading. The rotor installs and removes instantly without tools.

Centrifuge B8900-16 includes centrifuge, 12-place rotor with transparent lid, universal power supply and start-up supply of tubes and sealing clay. Replacement 12-place hematocrit rotors are available with or without a small plastic card reader and include a screw-on transparent lid. Choose plain or heparinized SafeCrit® tubes, supplied in vial of 100.

#### Specifications:

|                             |                            |
|-----------------------------|----------------------------|
| Maximum speed .....         | 15,800 rpm                 |
| Maximum RCF .....           | 13,700 x g                 |
| Total cycle time .....      | 120 sec.                   |
| Capacity .....              | 12 x 40mm capillary tubes  |
| Dimensions (H x W x D)..... | 6.0 x 6.8 x 8.6 in.        |
| Power requirements .....    | 100 to 240V, 50/60Hz, 1.7A |

| Cat. No.                       | Mfr. No. | Description  | Qty.     |
|--------------------------------|----------|--|----------|
| <b>CritSpin® systems</b>       |          |  |          |
| B8900-17                       | CS22     | With digital reader unit - UL listed and CE marked; digital reader - CE marked | 1/ea     |
| <b>Replacement rotors</b>      |          |  |          |
| B8900-28                       | RH12     | With card reader   | 1/ea     |
| B8900-29                       | RH12-1   | Without card reader  | 1/ea     |
| <b>SafeCrit® plastic tubes</b> |          |  |          |
| B8900-23                       | HP8H-10  | Heparinized - 40mm, 20µL   | 1,000/cs |
| B8900-24                       | HP8U-10  | Plain - 40mm, 20µL   | 1,000/cs |
| <b>Glass tubes</b>             |          |  |          |
| B8900-21                       | HT9H-10  | Heparinized - 40mm, 10µL   | 1,000/cs |
| B8900-22                       | HT9U-10  | Plain - 40mm, 10µL   | 1,000/cs |
| <b>Accessories</b>             |          |  |          |
| B8900-27                       | HS24-10  | Sealant pad for HCT tubes  | 10/bx    |
| B8900-18A                      | CSD2     | Digital hematocrit reader  | 1/ea     |
| B8900-68                       | O0-Ring  | O-rings  | 15/pk    |
| B8900-32                       | HR05     | Card-style reader  | 1/ea     |

### CytoFuge® 2 Cytocentrifuge System

IRIS SAMPLE PROCESSING - The CytoFuge® 2 system is a small, easy-to-use personal cytocentrifuge. Can be used as a diagnostic tool in cytology, hematology, microbiology and research applications. Samples are processed quickly and quietly on any bench or inside any safety cabinet. The results are consistent, and the easy-to-scan monolayer cell presentations are of excellent morphologic detail. The system ensures operator safety by meeting standards for mechanical, electrical and biohazard safety and weighs only 5.5 lbs. Rotor and chamber are bleach-compatible.



The reusable/disposable filter concentrators save time and improve results by helping to eliminate the need to clean and sterilize reusable sample chambers. Molded of virgin polypropylene, they include a hinged backing plate to simplify assembly and an integral filter card to absorb fluid at a controlled rate during the spin cycle. Concentrators accept 50 to 400µL of cell sample gently concentrated in a monolayer onto a 7mm diameter area on the slide with minimal cell loss to the filter. UL listed and CE marked.

#### Specifications:

|                             |  |
|-----------------------------|--|
| Maximum speed .....         | 4,400 rpm                              |
| Maximum RCF .....           | 1,060 x g                              |
| Cycle times .....           | 2, 4, 6, 8, 10 and 30 min.             |
| Sample size .....           | 50 to 200µL, 50 to 400µL, 300 to 800µL |
| Dimensions (H x W x D)..... | 5.3 x 6.6 x 8.6 in.                    |
| Power requirements .....    | 24VDC, 1.7A                            |

| Cat. No.                                      | Mfr. No. | Description                   | Qty.   |
|---|----------|-------------------------------|--------|
| <b>B8900-1</b>                                | CF02     | Centrifuge system             | 1/ea   |
| <b>Replacement parts/accessories</b>          |          |                               |        |
| <b>B8900-14</b>                               | CFRT-2   | Rotor                         | 1/ea   |
| <b>B8900-13</b>                               | CFRC     | Cover for rotor B8900-14      | 1/ea   |
| <b>B8900-7</b>                                | FF01     | Filter concentrator           | 48/bx  |
| <b>B8900-95</b>                               | FF01-B   | Filter concentrator           | 192/bx |
| <b>B8900-8</b>                                | FFR1     | Filter concentrator, reusable | 200/bx |
| <b>B8900-10</b>                               | FFCL     | Clip                          | 4/pk   |
| <b>B8900-9</b>                                | CLIP     | Clip for cell concentrator    | 10/pk  |
| <b>B8900-2</b>                                | BP01     | Backing plate                 | 10/bx  |
| <b>Reusable/disposable cell concentrators</b> |          |                               |        |
| <b>B8900-3</b>                                | CC01     | 1-well - disposable           | 10/bx  |
| <b>B8900-4</b>                                | CC03     | 3-well - disposable           | 10/bx  |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### StatSpin® CytoFuge 12

IRIS SAMPLE PROCESSING - The StatSpin® CytoFuge 12 is a small, versatile and economically priced cytocentrifuge that gently deposits cells in a monolayer onto microscope slides. Features cover interlock system and sealed rotor with transparent lid. Low-voltage drive system (24V). Results are consistent: easy-to-scan monolayer cell presentations of excellent morphologic detail. ETL listed and CE marked.



#### Specifications:

Rotor capacity ..... 1 to 12 slides  
Speeds (forces)..... 200 to 2,000rpm ± 5% (28-560 x g)  
Acceleration rate..... Low: 45-50 rpm/sec; med: 65-70 rpm/sec;  
high: 85-95 rpm/sec.  
Deceleration time..... 50-100 rpm/sec. <30 sec.  
Operating times ..... 1-99 min.  
Warranty ..... 1 yr.  
Power ..... 100-240VAC – 10%, 2.5A, 50 or 60Hz  
Dimensions..... 8.0 x 13.5 x 16.75 in.

Specification subject to change without prior notice.

StatSpin® is a registered trademark of Iris Sample Processing, Inc.

| Cat. No.                                      | Mfr. No. | Description                        | Qty.   |
|---|----------|------------------------------------|--------|
| B8900-91                                      | CF12     | Cytocentrifuge with 12-place rotor | 1/ea   |
| <b>Replacement parts/accessories</b>          |          |                                    |        |
| B8900-7                                       | FF01     | Filter concentrator                | 48/bx  |
| B8900-95                                      | FF01-B   | Filter concentrator                | 192/bx |
| B8900-8                                       | FFR1     | Filter concentrator, reusable      | 200/bx |
| B8900-10                                      | FFCL     | Clip                               | 4/pk   |
| B8900-9                                       | CLIP     | Clip for cell concentrator         | 10/pk  |
| B8900-2                                       | BP01     | Backing plate                      | 10/bx  |
| <b>Reusable/disposable cell concentrators</b> |          |                                    |        |
| B8900-3                                       | CC01     | 1-well - disposable                | 10/bx  |
| B8900-4                                       | CC03     | 3-well - disposable                | 10/bx  |

### StatSpin® Express 2 Centrifuge

IRIS SAMPLE PROCESSING - This compact and quiet centrifuge spins 5mL blood collection tubes in only 2 min. yet produces quality serum and plasma equal to 10 to 15 min. runs produced in larger equipment. This centrifuge is small and quiet enough to be used right at the workstation. Tubes can be processed as they arrive and no waiting is necessary for batches to run. The StatSpin® Express 2 centrifuge accepts standard glass or plastic tubes 1.5 to 5mL (13 x 75mm or smaller) and the rotor design minimizes the chance of breakage. Use clearing reagents B8900-45, B8900-46 and B8900-47 (available separately) with this centrifuge to clear lipemic samples in 95 sec. UL listed and CE marked.



#### Specifications:

Speed/force ..... 8,500 rpm/4,440 x g  
Cycle times ..... 30, 120 and 180 sec.  
Maximum tube size ..... 13 x 75mm (5mL)  
Dimensions (H x W x D)..... 6 x 6.6 x 8.6 in.  
Power requirements ..... 24VDC, 1.7A

| Cat. No.                 | Mfr. No. | Description                             | Qty.  |
|--------------------------|----------|---|-------|
| B8900-61                 | SSX2     | Centrifuge                              | 1/ea  |
| <b>Replacement parts</b> |          |   |       |
| B8900-63                 | SV01     | Insert for 5mL tube (13 x 75mm tube)    | 4/bx  |
| B8900-64                 | SV02     | Insert for 3mL tube (10.25 x 64mm tube) | 4/bx  |
| B8900-62                 | DL01     | Disposable chamber liner                | 10/bx |
| B8900-67                 | RTX4     | 4-place rotor                           | 1/ea  |

### StatSpin® Express 3 Centrifuge

IRIS SAMPLE PROCESSING - This quiet, compact centrifuge is easy to use. Simply select the 2, 3 or 5 min. button on the side of the unit and press "Start." The centrifuge's rapid acceleration to optimal g-forces produces sample separation in as little as 2 min. Features include a small, round footprint that takes up little bench space and fits well in small corners. Unit comes equipped with an 8-place rotor, a removable chamber liner, eight 10mL inserts, eight 5mL inserts and a power cord. Diagnostic error codes indicate imbalance and reduce chance of operator error. Centrifuge offers 10% bleach-compatible surfaces and a polypropylene rotor for easy cleaning. UL/CUL listed, CE marked. Use clearing reagents B8900-45, B8900-46 and B8900-47 (available separately) with this centrifuge to clear lipemic samples in 95 sec.



#### Specifications:

Speed/force ..... 7,200 rpm/4,440 x g (±5%) at 2 and 3 min.  
Cycle time ..... 5,600 rpm/2,685 x g (±5%) at 5 min.  
Acceleration time ..... ≤25 sec. to 95% of speed  
Deceleration time ..... ≤30 sec.  
Tube accommodation..... Accepts blood tubes 1.5 to 10mL  
Dimensions (H x W x D)..... 7.1 x 11 x 10 in.  
Power requirements ..... 100 to 240V, 50/60 Hz, 3A

| Cat. No. | Mfr. No. | Description       | Qty. |
|----------|----------|-------------------|------|
| B8900-85 | SSX3     | Centrifuge        | 1/ea |
| U2251-24 | SV10     | Tube - 13 x 75mm  | 1/pk |
| U2251-25 | SV11     | Tube - 13 x 100mm | 1/pk |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### StatSpin® Express 4 High-Speed Horizontal Centrifuge

IRIS SAMPLE PROCESSING - Prepare serum or plasma gel tubes in minutes with this high-speed horizontal centrifuge. In 3 minutes, the unit can produce serum or plasma equal to tubes spun for 10 or more minutes in conventional horizontal clinical centrifuges. It is ideal for rapid separation of gel tubes with flat gel barriers, sample prep for stat chemistry and single piece flow for rapid sample processing. Three speed settings help eliminate the need to adjust speed. Up to eight 1.5 to 10mL blood tubes can be processed at once.

Safety features include a shield interlock and a steel bowl to provide mechanical containment. The rugged, brushless motor is maintenance-free. Centrifuge is supplied with an 8-place rotor, eight 7mL inserts, eight 10mL inserts, an operator's manual, manual latch release tool, a hex key tool and a power cord. Other insert sizes are available separately. ETL listed and CE marked.

#### Specifications:

Cycle times ..... 5,100 rpm/4,000 x g at 3 and 5 min.,  
4,500 rpm/3,100 x g at 10 min.  
Acceleration time ..... ≤30 sec.  
Deceleration time ..... ≤30 sec.  
Tube accommodation ..... Accepts blood tubes 1.5 to 10mL  
Dimensions (H x W x D) ..... 8 x 13 x 16 in.  
Power requirements ..... 100 to 240V, 50/60 Hz, 2.5A



### StatSpin® MP Multipurpose Centrifuge

IRIS SAMPLE PROCESSING - The StatSpin® MP is an ideal, general-purpose centrifuge for the stat, clinic or office laboratory. Sample preparation is fast with quality serum or plasma in 30 to 120 seconds.

Small sample requirements make the StatSpin® MP centrifuge ideal for finger stick procedures. This reduces labor and expense involved in venous blood collection. Rotors can easily be changed with a simple push-on or pull-off motion, transforming the centrifuge from hematocrit to urine sediment to plasma. The interlocking lid prevents access while in cycle and it is designed to meet international safety standards. Power adapter included. UL listed and CE marked.

#### Specifications:

Speed ..... 9,800 to 20,000 rpm  
RCF ..... 3,900 to 12,000 x g

#### Cycle duration

Plasma ..... 30 seconds  
Urine ..... 45 seconds  
Lipemic clearing ..... 95 seconds  
Hematocrit ..... 120 seconds  
Coag PPP ..... 120 seconds  
Dimensions (H x W x D) ..... 5.25 x 6.63 x 8.75 in.  
Power requirements ..... 24VDC, 1.7A

### Accessories for StatSpin® Express 3 and Express 4 Centrifuges

IRIS SAMPLE PROCESSING

| Cat. No.                               | Mfr. No. | Description                          | Qty. |
|--|----------|--------------------------------------|------|
| <b>Accessories for Express 3 only</b>  |          |                                      |      |
| U2251-22                               | DL02     | Disposable replacement chamber liner | 3/pk |
| U2251-23                               | RTX8     | 8-place rotor                        | 1/ea |
| <b>Accessories for Express 3 and 4</b> |          |                                      |      |
| U2251-17                               | SV05     | Insert for BD™ 2mL tubes             | 4/pk |
| U2251-18                               | SV06     | Insert for 7mL tubes (16 x 75mm)     | 8/pk |
| U2251-19                               | SV07     | Insert for 10mL tubes (16 x 100mm)   | 8/pk |
| U2251-20                               | SV08     | Insert for 5mL tubes (13 x 75mm)     | 8/pk |
| U2251-21                               | SV09     | Insert for 7mL tubes (13 x 100mm)    | 8/pk |

| Cat. No.                                       | Mfr. No. | Description   | Qty.   |
|--|----------|---|--------|
| B8900-19                                       | SSMP     | Centrifuge  | 1/ea   |
| B8900-43                                       | CH03     | Heparin capillary collector                           | 50/bx  |
| B8900-86                                       | PBCP     | Rubber bulb for use with SafeCrit® tubes              | 100/bg |
| <b>Replacement rotors</b>                      |          |   |        |
| B8900-30                                       | RT12     | Replacement tube rotor                                | 1/ea   |
| B8900-31                                       | RM02     | Replacement rotor, holds 2 BD Microtainer® tubes only | 1/ea   |
| B8900-28                                       | RH12     | With card reader                                      | 1/ea   |
| B8900-29                                       | RH12-1   | Without card reader                                   | 1/ea   |
| <b>Accessories for use with rotor B8900-30</b> |          |   |        |
| B8900-40                                       | TP5G     | Untreated microtube - 0.5mL                           | 50/bx  |
| B8900-36                                       | TU15-10  | Urine tube  | 50/bg  |
| B8900-39                                       | PF35-05  | Transfer pipette                                      | 500/cs |

To order, call: 800.964.5227

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# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### Accessories for StatSpin® MP Multipurpose Centrifuge - StatSampler® Capillary Blood Collectors

IRIS SAMPLE PROCESSING - These blood collectors help eliminate the need for scooping by using a finger stick system with a capillary tube for easy blood drawing. After draining the sample into a microtube, the blood is centrifuged and serum or plasma is easily removed. Collectors are available with or without a separator gel. The gel barrier between the cells and plasma allows for no remixing of the sample. Collector with the separator gel barrier features a 200 $\mu$ L volume that yields approximately 120 $\mu$ L of serum or plasma with normal hematocrits.

Collectors are also available with an EDTA anticoagulant, which minimizes microclots. The blood is drained into a convenient microtube and can be remixed and sampled.



| Cat. No.                                | Mfr. No. | Description    | Qty.   |
|---|----------|----------------|--------|
| <b>Collectors without separator gel</b> |          |                |        |
| B8900-51                                | SS1E     | 100 ( $\mu$ L) | 50/bx  |
| B8900-52                                | SS1E-06  | 100 ( $\mu$ L) | 300/cs |
| B8900-53                                | SS2E     | 200 ( $\mu$ L) | 50/bx  |
| <b>Collector with separator gel</b>     |          |                |        |
| B8900-55                                | SS2H     | 200 ( $\mu$ L) | 50/bx  |

### Accessories for StatSpin® MP Multipurpose Centrifuge - StatSpin® LipoClear® and LipoClear® Plus Clearing Reagents

IRIS SAMPLE PROCESSING - These lipemia clearing reagents are convenient, non-toxic and non-carcinogenic. They feature a simple procedure for use: add lipemic serum/plasma, mix and let stand 5 min. and then centrifuge. Results are multiplied by a 1.2 factor when finished. Clearing reagents are designed not to affect enzymes and bilirubin. LipoClear® reagents B8900-45, -46 and -47 clear lipemic samples in 95 seconds with a StatSpin® LipoClear® Plus reagent B8900-76 clears lipemic samples in 3 minutes with a StatSpin® Express 2. Tubes can also be spun in other microcentrifuges.



| Cat. No.                                | Mfr. No. | Description       | Qty.  |
|---|----------|-------------------|-------|
| B8900-45                                | LC10     | 0.5mL sample size | 10/bg |
| B8900-46                                | LC40     | 0.5mL sample size | 40/bg |
| B8900-47                                | LC15     | 1.5mL sample size | 40/bg |
| <b>LipoClear® Plus clearing reagent</b> |          |                   |       |
| B8900-76                                | LCPI     | 30mL bottle       | 1/ea  |

### Hematocrit Plastic Tubes

IRIS SAMPLE PROCESSING - These 100% plastic hematocrit tubes help eliminate the risk of infectious disease transmission by blood via broken glass. The 75mm tubes are for use in conventional centrifuges that support the full length of the tube.

| Cat. No. | Mfr. No. | Description       | Qty.     |
|----------|----------|-------------------|----------|
| B8900-25 | HP4H-10  | Heparinized - red | 1,000/cs |
| B8900-26 | HP4U-10  | Plain - blue      | 1,000/cs |



### 24-Place Microhematocrit Centrifuge

LW SCIENTIFIC - The M24 unit is designed for flexibility and ease of use in the laboratory. Spin hematocrits in less than 5 minutes at 12,000 rpm. This device has suction cups on its feet to hold it securely in place and features a handy microhematocrit reader provided with every unit. Read results directly on the rotor with the included reader disc.

#### Specifications:

|                              |                  |
|------------------------------|------------------|
| Maximum capacity.....        | 24 x 75mm        |
| Fixed speed.....             | 12,000 rpm       |
| Nominal RCF.....             | 14,800 x g       |
| Dimensions (H x W x L) ..... | 10 x 12 x 13 in. |
| Power requirements .....     | 110VAC           |

| Cat. No. | Mfr. No.      | Description         | Qty. |
|----------|---------------|---------------------|------|
| C5700-12 | HEC-24HF-7501 | 24-place centrifuge | 1/ea |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### C3 Select Centrifuge

LW SCIENTIFIC - The C3 spins 3 to 15mL test tubes up to 3,000 rpm. It has tighter straight-line gel separations in order to reduce re-spins and re-mixes and allows for veterinary fecals to spin with coverslips on the tube. Select from blood, urine or fecals on the speed control, set the timer and the C3 Select will spin at the correct speed.

#### Specifications:

|  |                      |
|--|----------------------|
| 8-tube capacity .....                      | 3 to 15mL size tubes |
| Maximum tube size .....                    | 17.5 x 133mm         |
| Dimensions (H x W x L) .....               | 12 x 14.5 x 18 in.   |
| Power requirements .....                   | 110VAC               |
| <b>Selectable 3-position speed control</b> |                      |
| 3,000 rpm for blood .....                  | 1,500 g              |
| 1,600 rpm for urine and semen .....        | 400 g                |
| 1,300 rpm for fecals .....                 | 280 g                |



### CxR - Horizontal, Blood-Only Centrifuge

LW SCIENTIFIC - Perfect for reference and blood labs, this centrifuge has a brushless motor that is virtually maintenance-free and the clear sight window allows for easy strobing for speed verification. It accommodates most test tubes from 3 to 15mL. Produces 1800 G force for straight-line separations.



#### Specifications:

|                              |                      |
|------------------------------|----------------------|
| 6-tube capacity .....        | 3 to 15mL size tubes |
| Maximum tube size .....      | 17.5 x 125mm         |
| Fixed speed.....             | 3400 rpm             |
| Dimensions (H x W x L) ..... | 8.75 x 13.5 x 15 in. |

| Cat. No.        | Mfr. No.      | Description                             | Qty. |
|-----------------|---------------|---|------|
| <b>C5700-46</b> | CXC-06SF-1501 | 6-place horizontal swing-out centrifuge | 1/ea |

### Combo Centrifuges

LW SCIENTIFIC - The V24 Combo centrifuge spins either microhematocrits or test tubes. Centrifuge C5700-16 features a built-in digital tachometer. Rotor (available separately) is required; choose from 24-place test tube rotor or 24-place hematocrit rotor.



#### Specifications:

|                              |                  |
|------------------------------|------------------|
| Maximum speed .....          | 12,000 rpm       |
| Maximum RCF .....            | 14,800 x g       |
| Dimensions (H x W x L) ..... | 11 x 14 x 17 in. |

#### Maximum capacity

|                                      |           |
|--------------------------------------|-----------|
| 24-place test tube rotor .....       | 24 x 15mL |
| 24-place microhematocrit rotor ..... | 24 x 75mm |

| Cat. No.        | Mfr. No.      | Description                             | Qty. |
|-----------------|---------------|---|------|
| <b>C5700-15</b> | CMP-BX77-7701 | Centrifuge (without digital tachometer) | 1/ea |
| <b>C5700-16</b> | CMP-BX77-77T1 | Centrifuge (with digital tachometer)    | 1/ea |

#### Rotors

|                 |               |                           |      |
|-----------------|---------------|---------------------------|------|
| <b>C5700-18</b> | CMP-RT24-15TT | 24-place test tube rotor  | 1/ea |
| <b>C5700-19</b> | CMP-RT24-75HE | 24-place hematocrit rotor | 1/ea |



E8F - fixed speed



E8V - variable speed

### E8 Fixed and Variable Centrifuges

LW SCIENTIFIC - This unit accommodates most test tubes from 3 to 15mL. The wide stance helps eliminate wobble, while the suction-cupped feet help prevent slipping. The brushless motor (110V only) is virtually maintenance-free and the lid port allows easy viewing of specimens while in use.

#### Specifications:

|                              |                                    |
|------------------------------|------------------------------------|
| 8-tube capacity .....        | 3 to 15mL size tubes               |
| Maximum RCF .....            | 1,350 g                            |
| Maximum speed fixed.....     | 3,300 rpm - for blood only         |
| Maximum speed variable.....  | 800-3,300 rpm - blood, urine, etc. |
| Dimensions (H x W x L) ..... | 10 x 10 x 10 in.                   |

| Cat. No.         | Mfr. No.      | Description               | Qty. |
|------------------|---------------|---------------------------|------|
| <b>C5700-47</b>  | E8C-08AF-1501 | Fixed speed centrifuge    | 1/ea |
| <b>M8000-126</b> | E8C-08AV-1501 | Variable speed centrifuge | 1/ea |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges



### Portafuge

LW SCIENTIFIC - The 8-place LW Scientific Portafuge is a portable, fixed speed centrifuge designed to fit the needs of mobile medics and traveling lab technicians. This unit accommodates most test tubes from 3 to 15mL. This unit is virtually maintenance-free and the lid port allows easy viewing and taching for calibration. Simply insert the cigarette plug into your car's power outlet for quick blood separation at 3,000+ rpm.

#### Specifications:

|                              |  |
|------------------------------|--|
| 8-tube capacity .....        | 3 to 15mL size tubes   |
| Fixed speed.....             | 3,000–3,500 rpm fixed speed - for blood only (speed may vary by car model) |
| Maximum RCF .....            | 1,300–1,500 g  |
| 12V DC motor.....            | Maintenance-free   |
| Dimensions (H x W x L) ..... | 10 x 10 x 10 in.   |

| Cat. No.         | Mfr. No.      | Description                           | Qty. |
|------------------|---------------|---------------------------------------|------|
| <b>C5700-48</b>  | E8C-08AF-150P | Portafuge centrifuge 12V, fixed speed | 1/ea |
| <b>M8000-125</b> | E8P-ADWL-12V8 | AC-DC 110V power adapter              | 1/ea |

### HemataSTAT Easy Read® Microhematocrit Centrifuge

SEPARATION TECHNOLOGY - Spin up to six capillary tubes in only 60 seconds with this small, lightweight centrifuge. Features whisper-quiet operation, a built-in automatic digital tube reader with LCD and a built-in tachometer. Standard 1.1mm ID capillary tubes can be spun and read on these centrifuges. Centrifuges come complete with power supply, 10 disposable transparent tube holders, instruction manual, training video and quick-reference procedure guide.

| Cat. No.       | Mfr. No. | Description                                | Qty. |
|----------------|----------|--|------|
| <b>100-123</b> | 100-123  | Centrifuge - for use with 1.1mm I.D. tubes | 1/ea |



### ZipSpin Portable Microtube and ZipOCrit Microhematocrit Centrifuges

LW SCIENTIFIC - These portable, compact centrifuges spin either microtubes or microhematocrit tubes at high rates of speed.

The ZipSpin Centrifuge C5700-1 is suited for microtubes and features both 6- and 12-place rotors; the 6-place rotor holds 1.5 and 2mL tubes, while the 12-place rotor holds 0.5mL tubes. The unit is powered by a brushless motor and will reach speeds of up to 7,000 rpm. The centrifuge's transparent strobe-through lid allows for exact speed calibration.

The ZipOCrit Centrifuge C5700-11 is ideal for microhematocrit-related procedures and will reach 11,000 rpm for quick separations. The unit comes with metal tube shields, a vial of Mylar®-coated 75mm capillary tubes and a 15 min. timer.

#### Specifications:

|                              |   |
|------------------------------|---|
| Dimensions (H x W x L) ..... | 4.5 x 6 x 8 in.                         |
| Power requirements .....     | DC 12V (AC adapter power cord included) |

#### Model C5700-1

|                       |  |
|-----------------------|--|
| Maximum capacity..... | 6-place rotor for 1.5 and 2.0mL microtubes;<br>12-place rotor for 0.5mL microtubes |
| Maximum speed.....    | 7,000 rpm  |
| Maximum RCF .....     | 2,800 x g  |

#### Model C5700-11

|                       |            |
|-----------------------|------------|
| Maximum capacity..... | 4 x 75mm   |
| Maximum speed.....    | 11,000 rpm |
| Maximum RCF .....     | 4,400 x g  |

| Cat. No.        | Mfr. No.      | Description                                  | Qty. |
|-----------------|---------------|--|------|
| <b>C5700-1</b>  | ZPC-06AV-0203 | ZipSpin microtube centrifuge                 | 1/ea |
| <b>C5700-11</b> | ZPC-04HF-7503 | ZipOCrit portable microhematocrit centrifuge | 1/ea |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### HemataSTAT II® Microhematocrit Centrifuge

**SEPARATION TECHNOLOGY -** This whisper-quiet device will spin up to six capillary tubes in only 60 seconds. It has an easy-to-use, built-in tube reader that provides an electronic display of test results. For operator safety, the unit has a locking lid and a gasket seal for aerosol protection. Also, disposable transparent tube holders are used for the capillary tubes while spinning to minimize contact with specimens. Standard 75mm capillary tubes with either a 1.1mm or 0.5mm I.D. can be spun and read on the device. Capillary tubes C1801-15 require HemataSEAL® tube sealant. Operates on AC current or with an optional rechargeable battery (available separately) to enhance its usefulness in remote locations. Designed to fit almost any lab location. Dimensions (W x L x H): 7 x 11 x 5 in.



| Cat. No.        | Mfr. No. | Description  | Qty.     |
|-----------------|----------|--|----------|
| <b>C1801-1</b>  | 100-100  | HemataSTAT II® centrifuge  | 1/ea     |
| <b>C1801-12</b> | 230-100  | Tube holders   | 50/pk    |
| <b>270-106</b>  | 270-106  | ClearCRIT® 100% plastic capillary tubes, 1.1mm I.D.                | 1,000/bx |
| <b>270-107</b>  | 270-107  | ClearCRIT® 100% plastic capillary tubes, 0.5mm I.D.                | 1,000/bx |
| <b>C1801-15</b> | 270-108  | ClearCRIT® Mylar®-wrapped capillary tubes, 1.1mm I.D.              | 1,000/bx |
| <b>C1806-22</b> | 260-100  | HemataSEAL® tube sealant   | 10/bx    |
| <b>C1806-23</b> | 270-109  | ClearCRIT® Mylar®-wrapped self-sealing capillary tubes, 1.1mm I.D. | 2,000/bx |

### Micro12™ Microcentrifuge

**SEPARATION TECHNOLOGY -** Use this microcentrifuge for a variety of applications, including quick spindowns, microfiltrations and small-volume blood and urine separations. It includes a fixed-angle rotor that accommodates eighteen 2mL tubes directly or tubes up to 0.5mL in size with adapters. The microcentrifuge also features a 60 min. timer and a locking mechanism that prevents the lid of the microcentrifuge from being opened while the rotor is spinning.



#### Specifications:

Maximum capacity ..... 18 x 2.0mL  
 Maximum speed ..... 14,000 rpm  
 Maximum RCF ..... 16,000 x g  
 Dimensions (W x D x H) ..... 8.25 x 8.9 x 7.6 in.

| Cat. No.        | Mfr. No. | Description     | Qty. |
|-----------------|----------|-----------------|------|
| <b>C1801-24</b> | 100-152  | Microcentrifuge | 1/ea |

### Disposable Tube Holders for PlasmaPrep® Centrifuge

**SEPARATION TECHNOLOGY -** Use these tube holders instead of adapters and cushions. In case of breakage, simply discard the holder and the tube. There's no need to clean the centrifuge bowl or to have contact with the specimen. Designed for use with centrifuge B4360B, tube holders promote rotor balancing and are color-coded for convenience. Reusable. 25 tube holders per package.

| Cat. No.        | Mfr. No. | Description                                | Qty.  |
|-----------------|----------|--|-------|
| <b>B4360-11</b> | 230-111  | Use with 10.25 x 64mm, red, rubber stopper | 25/pk |
| <b>B4360-12</b> | 230-112  | Use with 13 x 75mm, blue, rubber stopper   | 25/pk |
| <b>B4360-14</b> | 230-114  | Use with 13 x 100mm, pink, rubber stopper  | 25/pk |
| <b>B4360-13</b> | 230-113  | Use with 13 x 75mm, silver, plastic top    | 25/pk |
| <b>B4360-15</b> | 230-115  | Use with 13 x 100mm, gold, plastic top     | 25/pk |
| <b>B4360-16</b> | 230-116  | Use with 16 x 100mm, green, rubber stopper | 25/pk |

### HemataCHEK® Hematocrit Reference Controls

**SEPARATION TECHNOLOGY -** HemataCHEK® controls provide quality assurance for centrifuge operating parameters including rpm, spin time, tube readers, user technique and supplies. The controls are available in low, normal and high levels and are packaged in different combinations to help you meet your application requirements. They offer you great stability—they don't need to be refrigerated and remain stable up to 31 days after being opened. Controls have a 2-year shelf life from date of manufacture. Available in boxes of 6 vials.



| Cat. No.       | Mfr. No. | Description  | Qty. |
|----------------|----------|--|------|
| <b>C1801-7</b> | 300-105  | 6 x 2.5mL low level  | 6/ea |
| <b>C1801-2</b> | 300-101  | 6 x 2.5mL normal level   | 6/ea |
| <b>C1801-8</b> | 300-107  | 6 x 2.5mL high level   | 6/ea |
| <b>C1801-5</b> | 300-103  | 3 x 2.5mL low level and 3 x 2.5mL normal level                       | 6/ea |
| <b>C1801-6</b> | 300-104  | 3 x 2.5mL normal level and 3 x 2.5mL high level                      | 6/ea |
| <b>C1801-4</b> | 300-102  | 2 x 2.5mL low level, 2 x 2.5mL normal level and 2 x 2.5mL high level | 6/ea |

# Centrifuges and Accessories

## Centrifuges/Microcentrifuges

### PowerSpin™ MX Centrifuge

UNICO - The UNICO model PowerSpin™ MX Series variable speed centrifuge is specially designed for years of demanding laboratory work. It is easy-to-read, user-friendly and aids against human error. The MX centrifuge runs extremely quiet. The rubber shock absorbing suction cup feet hold the unit in place resulting in a quieter run with less vibration.

- Quiet running (50dB at 3,400 rpm)
- 60 min. digital timer
- Lid window for speed verification with strobe tachometer
- Zero RPM Safety Latching System to secure lid from being opened while rotor is spinning



#### Specifications:

Maximum capacity ..... 16 x 117mm  
Speed range ..... 1,000–3,400 rpm  
Maximum RCF ..... 1,750 x g

| Cat. No. | Mfr. No. | Description    | Qty. |
|----------|----------|----------------|------|
| C8624    | C8624    | 24-place rotor | 1/ea |

### UNICO® C-MH30 Microhematocrit Centrifuge

UNICO - This centrifuge is made of formed metal and has a baked paint application that is acid- and reagent-resistant. A safety switch built into the handle assembly disconnects the power to the motor whenever the latch is lifted. The hematocrit tray is made of plastic composite material backed by an aluminum shell for durability and lighter weight. The brushed motor is mounted on rubber mounts to provide quieter running and less vibration. The centrifuge features a 24-place rotor with replaceable rubber ring and screw-down metal lid. It also has a dependable 5 min. timer with bell signal at end of run. Nominal speed is 12,000 rpm.



#### Specifications:

Maximum capacity ..... 24 capillary tubes, microhematocrit tubes  
Maximum speed ..... 12,000 rpm  
Maximum RCF ..... 15,000

| Cat. No. | Mfr. No. | Description                | Qty. |
|----------|----------|----------------------------|------|
| C-MH30   | C-MH30   | Microhematocrit centrifuge | 1/ea |

### UNICO® PowerSpin™ FX and LX Benchtop Centrifuges

UNICO - These tabletop centrifuges are economical, reliable and extremely quiet. They can spin at speeds of either 3,400 rpm or 300 to 4,000 rpm to help ensure clean, complete separation of cellular components and yield superior serum or plasma specimens. PowerSpin™ centrifuges operate at less than 58dB for a quieter, less stressful working environment. All models feature a chemical-resistant, easy-to-clean exterior, maintenance-free, brushless motor and a latching lid with safety switch triggered to shut off power to motor when lid is raised. Additional features include a 0 to 30 min. timer with bell tone signal and a lid window for strobe tachometer rpm check.



Choose between fixed- or variable-speed centrifuges with either a 6- or 8-place angled rotor for 2 to 10mL tubes. The 6-place rotor can accommodate up to three 15mL tubes. Adapters (available separately) are required for 2 or 4 to 5mL tubes. Optional Tube-Holdster™ to organize balance tubes and adapters. The centrifuges' stainless steel rotor chamber is easily accessible for cleaning and disinfection. Suction cup rubber feet are included for both stability and vibration reduction. UL-approved components. PowerSpin™ LX models meet CLIA regulations for speed control.

| Cat. No.  | Mfr. No. | Description                    | Qty.  |
|---|----------|--------------------------------|-------|
| <b>FX centrifuges - 3,400 rpm (speed) - 1,350 x g (RCF)</b>       |          |                                |       |
| C806  | C806     | 6-place rotor - 6 x 10mL       | 1/ea  |
| C808  | C808     | 8-place rotor - 8 x 10mL       | 1/ea  |
| <b>LX centrifuges - 300 – 4,000 rpm (speed) - 1,825 x g (RCF)</b> |          |                                |       |
| C856  | C856     | 6-place rotor - 6 x 10mL       | 1/ea  |
| C858  | C858     | 8-place rotor - 8 x 10mL       | 1/ea  |
| <b>Accessories for PowerSpin™ centrifuges</b>                     |          |                                |       |
| C800-01   | C800-01  | 8-place rotor                  | 1/ea  |
| C800-03   | C800-03  | Adapter for 5mL tubes          | 10/pk |
| C800-04   | C800-04  | Pediatric or microtube adapter | 2/pk  |
| C800-18   | C800-18  | Tube Holdster™ 18-place        | 1/ea  |
| C800-75   | C800-75  | Tachometer                     | 1/ea  |

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## Refrigerators: General Laboratory

**Premier Series  
Laboratory Refrigerators**

**CARDINAL HEALTH** - Our selection of high performance laboratory refrigerators offers cabinet sizes to fit a variety of space needs and storage equipment.

- Powerful industrial compressors
- Thick CFC-free insulation
- Access port standard
- Adjustable temperature set point
- Adjustable temperature alarms
- Built-in contacts for remote alarms
- Self-closing doors
- Adjustable shelves
- Smart defrost for temperature stability

UL certified.



**Temperature range: +1°C to +8°C, factory pre-set to +4°C (auto defrost)**

| Cat. No.  | Cu. Ft. | Voltage (Hz) | Amps/Breaker (Plug) | Cabinet     | Door                  | Shelves | Int. Dimensions* H x D x W in. | Ext. Dimensions* H x D x W in. | Ship Weight lbs. |
|-----------|---------|--------------|---------------------|-------------|-----------------------|---------|--------------------------------|--------------------------------|------------------|
| R3863-1A  | 4.9     | 115 (60)     | 8.0/15 (P1)         | Upright     | Single, solid         | 3       | 20 x 20.5 x 20                 | 33.4 x 26 x 24                 | 220              |
| LRG46A    | 4.9     | 115 (60)     | 8.0/15 (P1)         | Upright     | Single, glass         | 3       | 20 x 20.5 x 20                 | 33.4 x 26 x 24                 | 220              |
| LRG46D    | 4.9     | 208/230 (60) | 6.0/15 (P4)         | Upright     | Single, glass         | 3       | 20 x 20.5 x 20                 | 33.4 x 26 x 24                 | 220              |
| R3802-3A  | 11.5    | 115 (60)     | 9.4/15 (P1)         | Space saver | Single, solid         | 4       | 52.4 x 21.75 x 20              | 73.6 x 29.4 x 24               | 280              |
| LRG124A   | 11.5    | 115 (60)     | 9.4/15 (P1)         | Space saver | Single, glass         | 4       | 52.4 x 21.75 x 20              | 73.6 x 29.4 x 24               | 280              |
| LRG124D   | 11.5    | 208/230 (60) | 6.0/15 (P4)         | Space saver | Single, glass         | 4       | 52.4 x 21.75 x 20              | 73.6 x 29.4 x 24               | 280              |
| R3802-5A  | 23.3    | 115 (60)     | 9.4/15 (P1)         | Upright     | Single, solid         | 4       | 58 x 29 x 24                   | 79.2 x 37.2 x 28               | 370              |
| LRG234A   | 23.3    | 115 (60)     | 9.4/15 (P1)         | Upright     | Single, glass         | 4       | 58 x 29 x 24                   | 79.2 x 37.2 x 28               | 370              |
| R3802-5D  | 23.3    | 208/230 (60) | 6.0/15 (P4)         | Upright     | Single, solid         | 4       | 58 x 29 x 24                   | 79.2 x 37.2 x 28               | 370              |
| LRG234D   | 23.3    | 208/230 (60) | 6.0/15 (P4)         | Upright     | Single, glass         | 4       | 58 x 29 x 24                   | 79.2 x 37.2 x 28               | 370              |
| R3802-6A  | 29.2    | 115 (60)     | 9.4/15 (P1)         | Upright     | Single, solid         | 4       | 58 x 29 x 30                   | 79.2 x 37.2 x 34               | 435              |
| LRG304A   | 29.2    | 115 (60)     | 9.4/15 (P1)         | Upright     | Single, glass         | 4       | 58 x 29 x 30                   | 79.2 x 37.2 x 34               | 435              |
| R3802-6D  | 29.2    | 208/230 (60) | 6.0/15 (P4)         | Upright     | Single, solid         | 4       | 58 x 29 x 30                   | 79.2 x 37.2 x 34               | 435              |
| LRG304D   | 29.2    | 208/230 (60) | 6.0/15 (P4)         | Upright     | Single, glass         | 4       | 58 x 29 x 30                   | 79.2 x 37.2 x 34               | 435              |
| R3802-7A  | 45.8    | 115 (60)     | 15.0/20 (P2)        | Upright     | Double, sliding glass | 8       | 58 x 26 x 52.5                 | 79.2 x 34.5 x 56.5             | 670              |
| R3802-7D  | 45.8    | 208/230 (60) | 8.0.5/15 (P4)       | Upright     | Double, sliding glass | 8       | 58 x 26 x 52.5                 | 79.2 x 34.5 x 56.5             | 670              |
| R3802-10A | 51.1    | 115 (60)     | 15/20 (P2)          | Upright     | Double, solid         | 8       | 58 x 29 x 52.5                 | 79.2 x 37.2 x 56.5             | 585              |
| LRG504A   | 51.1    | 115 (60)     | 15/20 (P2)          | Upright     | Double, glass         | 8       | 58 x 29 x 52.5                 | 79.2 x 37.2 x 56.5             | 585              |
| R3802-10D | 51.1    | 208/230 (60) | 8.0.5/15 (P4)       | Upright     | Double, solid         | 8       | 58 x 29 x 52.5                 | 79.2 x 37.2 x 56.5             | 585              |
| LRG504D   | 51.1    | 208/230 (60) | 8.0.5/15 (P4)       | Upright     | Double, glass         | 8       | 58 x 29 x 52.5                 | 79.2 x 37.2 x 56.5             | 585              |
| R3802-15A | 78.8    | 115 (60)     | 16.0/20 (P2)        | Upright     | Triple, solid         | 12      | 58 x 29 x 81                   | 79.2 x 37.2 x 85               | 805              |
| LRG754A   | 78.8    | 115 (60)     | 16.0/20 (P2)        | Upright     | Triple, glass         | 12      | 58 x 29 x 81                   | 79.2 x 37.2 x 85               | 805              |
| R3802-15D | 78.8    | 208/230 (60) | 10.5/15 (P4)        | Upright     | Triple, solid         | 12      | 58 x 29 x 81                   | 79.2 x 37.2 x 85               | 805              |
| LRG754D   | 78.8    | 208/230 (60) | 10.5/15 (P4)        | Upright     | Triple, glass         | 12      | 58 x 29 x 81                   | 79.2 x 37.2 x 85               | 805              |

\* Published interior volumes are nominal; useable cu. ft. capacities may be offset by shelves, drawers, blower coils or cabinet protrusions. For specific cabinet dimensions and allowances, or for verification of clearance tolerances, contact our sales representatives. Product performance may be affected by ambient temperature conditions, humidity conditions, sample loading preferences and frequency of door openings. Contact our sales representatives for specific inquiries regarding your application.

# Cold Storage

## Refrigerators: General Laboratory

### Pro Series Laboratory Refrigerators

**CARDINAL HEALTH** - Our refrigerators deliver stable temperature control over a range of +1°C to +12°C. Refrigerator door options include solid and glass models. Also available with painted coated steel or stainless steel exteriors. Shelving with pilaster mounting system allows flexibility in placement. Equipped with 1 in. access port and 2 in. dual wheel casters.

- Full featured alarm system
- Lockable doors
- Temperature recording charts to confirm optimal storage parameters

UL certified.



**Temperature range: +1°C to +12°C, preset to +4°C; undercounter +2°C to +10°C, preset to +4°C (auto defrost)**

| Cat. No.  | Cu. Ft. | Voltage (Hz) | Finish          | Door  | Chart Recorder | Shelves | Int. Dimensions H x D x W in. | Ext. Dimensions H x D x W in. | Ship Weight lbs. |
|---|---------|--------------|-----------------|-------|----------------|---------|-------------------------------|-------------------------------|------------------|
| <b>Temperature range: +2°C to +10°C, preset to +4°C</b> |         |              |                 |       |                |         |                               |                               |                  |
| MR05PASEE   | 5.4     | 115 (60)     | Painted         | Solid | No             | 2       | 20.4 x 21.5 x 19.4            | 34.6 x 27.5 x 24              | 210              |
| <b>Temperature range: +1°C to +12°C, preset to +4°C</b> |         |              |                 |       |                |         |                               |                               |                  |
| MR12PAGAEE  | 12      | 115 (60)     | Painted         | Glass | No             | 4       | 45.75 x 20.75 x 21            | 72 x 24 x 24                  | 230              |
| MR12PAGARE  | 12      | 115 (60)     | Painted         | Glass | Yes            | 4       | 45.75 x 20.75 x 21            | 72 x 24 x 24                  | 230              |
| MR25PAGAEE  | 23      | 115 (60)     | Painted         | Glass | No             | 4       | 61.75 x 28.5 x 24             | 78 x 32 x 27                  | 300              |
| MR25PAGARE  | 23      | 115 (60)     | Painted         | Glass | Yes            | 4       | 61.75 x 28.5 x 24             | 78 x 32 x 27                  | 300              |
| MR25PASAE   | 23      | 115 (60)     | Painted         | Solid | No             | 4       | 61.75 x 28.5 x 24             | 78 x 32 x 27                  | 300              |
| MR25PASARE  | 23      | 115 (60)     | Painted         | Solid | Yes            | 4       | 61.75 x 28.5 x 24             | 78 x 32 x 27                  | 300              |
| MR25SSGAEE  | 23      | 115 (60)     | Stainless steel | Glass | No             | 4       | 61.75 x 28.5 x 24             | 78 x 32 x 27                  | 300              |
| MR25SSGARE  | 23      | 115 (60)     | Stainless steel | Glass | Yes            | 4       | 61.75 x 28.5 x 24             | 78 x 32 x 27                  | 300              |
| MR25SSSAEE  | 23      | 115 (60)     | Stainless steel | Solid | No             | 4       | 61.75 x 28.5 x 24             | 78 x 32 x 27                  | 300              |
| MR25SSSARE  | 23      | 115 (60)     | Stainless steel | Solid | Yes            | 4       | 61.75 x 28.5 x 24             | 78 x 32 x 27                  | 300              |
| MR30PAGAEE  | 27      | 115 (60)     | Painted         | Glass | No             | 4       | 61.75 x 28.5 x 27             | 78 x 32 x 30                  | 386              |
| MR30PAGARE  | 27      | 115 (60)     | Painted         | Glass | Yes            | 4       | 61.75 x 28.5 x 27             | 78 x 32 x 30                  | 386              |
| MR30PASAE   | 27      | 115 (60)     | Painted         | Solid | No             | 4       | 61.75 x 28.5 x 27             | 78 x 32 x 30                  | 386              |
| MR30PASARE  | 27      | 115 (60)     | Painted         | Solid | Yes            | 4       | 61.75 x 28.5 x 27             | 78 x 32 x 30                  | 386              |
| MR30SSGAEE  | 27      | 115 (60)     | Stainless steel | Glass | No             | 4       | 61.75 x 28.5 x 27             | 78 x 32 x 30                  | 386              |
| MR30SSGARE  | 27      | 115 (60)     | Stainless steel | Glass | Yes            | 4       | 61.75 x 28.5 x 27             | 78 x 32 x 30                  | 386              |
| MR30SSSAEE  | 27      | 115 (60)     | Stainless steel | Solid | No             | 4       | 61.75 x 28.5 x 27             | 78 x 32 x 30                  | 386              |
| MR30SSSARE  | 27      | 115 (60)     | Stainless steel | Solid | Yes            | 4       | 61.75 x 28.5 x 27             | 78 x 32 x 30                  | 386              |

# Cold Storage

## Refrigerators: General Laboratory

### Pro Series Laboratory Refrigerators (continued)



*Internal light and fan standard on all Pro Series models*



*1 in. access port standard on all refrigerators and freezers*

Temperature range: +1°C to +12°C, preset to +4°C (auto defrost)

| Cat. No.   | Cu. Ft. | Voltage (Hz) | Finish          | Door  | Chart Recorder | Shelves | Int. Dimensions H x D x W in. | Ext. Dimensions H x D x W in. | Ship Weight lbs. |
|------------|---------|--------------|-----------------|-------|----------------|---------|-------------------------------|-------------------------------|------------------|
| MR38PAGAEE | 38      | 115 (60)     | Painted         | Glass | No             | 8       | 61.75 x 27 x 40.5             | 78 x 32 x 43.5                | 524              |
| MR38PAGARE | 38      | 115 (60)     | Painted         | Glass | Yes            | 8       | 61.75 x 27 x 40.5             | 78 x 32 x 43.5                | 524              |
| MR45PAGAEE | 45      | 115 (60)     | Painted         | Glass | No             | 8       | 61.75 x 27 x 48.6             | 78 x 32 x 52                  | 561              |
| MR45PAGARE | 45      | 115 (60)     | Painted         | Glass | Yes            | 8       | 61.75 x 27 x 48.6             | 78 x 32 x 52                  | 561              |
| MR45SSGAEE | 45      | 115 (60)     | Stainless steel | Glass | No             | 8       | 61.75 x 27 x 48.6             | 78 x 32 x 52                  | 561              |
| MR45SSGARE | 45      | 115 (60)     | Stainless steel | Glass | Yes            | 8       | 61.75 x 27 x 48.6             | 78 x 32 x 52                  | 561              |
| MR49PAGAEE | 49      | 115 (60)     | Painted         | Glass | No             | 8       | 61.75 x 28.5 x 48.6           | 78 x 32 x 52                  | 597              |
| MR49PAGARE | 49      | 115 (60)     | Painted         | Glass | Yes            | 8       | 61.75 x 28.5 x 48.6           | 78 x 32 x 52                  | 597              |
| MR49PASAEE | 49      | 115 (60)     | Painted         | Solid | No             | 8       | 61.75 x 28.5 x 48.6           | 78 x 32 x 52                  | 597              |
| MR49PASARE | 49      | 115 (60)     | Painted         | Solid | Yes            | 8       | 61.75 x 28.5 x 48.6           | 78 x 32 x 52                  | 597              |
| MR49SSGAEE | 49      | 115 (60)     | Stainless steel | Glass | No             | 8       | 61.75 x 27 x 48.6             | 78 x 32 x 52                  | 597              |
| MR49SSGARE | 49      | 115 (60)     | Stainless steel | Glass | Yes            | 8       | 61.75 x 27 x 48.6             | 78 x 32 x 52                  | 597              |
| MR49SSSAEE | 49      | 115 (60)     | Stainless steel | Solid | No             | 8       | 61.75 x 27 x 48.6             | 78 x 32 x 52                  | 597              |
| MR49SSSARE | 49      | 115 (60)     | Stainless steel | Solid | Yes            | 8       | 61.75 x 27 x 48.6             | 78 x 32 x 52                  | 597              |
| MR72PAGAEE | 72      | 115 (60)     | Painted         | Glass | No             | 12      | 61.75 x 28.5 x 72             | 78 x 32 x 75                  | 730              |
| MR72PAGARE | 72      | 115 (60)     | Painted         | Glass | Yes            | 12      | 61.75 x 28.5 x 72             | 78 x 32 x 75                  | 730              |
| MR72SSGAEE | 72      | 115 (60)     | Stainless steel | Glass | No             | 12      | 61.75 x 28.5 x 72             | 78 x 32 x 75                  | 730              |
| MR72SSGARE | 72      | 115 (60)     | Stainless steel | Glass | Yes            | 12      | 61.75 x 28.5 x 72             | 78 x 32 x 75                  | 730              |

# Cold Storage

## Refrigerators: General Laboratory



### Thermo Scientific Jewett® High-Performance Refrigerators

THERMO SCIENTIFIC - Jewett® high-performance refrigerators offer safe, secure cold storage solutions for critical samples and materials. Designed for worry-free operation and the secure, controlled environment your applications and materials require.

- High-density, CFC-free, blown-in insulation conforms to cabinet shape to reduce gaps and increase temperature uniformity
- Powerful, industrial-grade compressors for optimal product protection
- 1 in. (2.5cm) insulated access port standard
- Positive, forced-air circulation maintains temperature uniformity throughout the cabinet
- Set of four 2 in. (5.1cm) casters included: two locking and two regular
- Environmentally friendly, mercury-free LED interior lighting

- Choice of solid or glass lockable doors
- Optional inkless, 7-day, graphic chart recorder
- Bright, digital temperature display
- Microprocessor control system with audio and visual alarms
- Spring-loaded, self-closing doors with 90° stay-open feature
- Hospital-grade plug
- NOTE: Chart recorders are optional, not standard

| Cat. No. | Mfr. No. | Description                           | Qty. |
|----------|----------|---------------------------------------|------|
| JRG404A  | JRG404A  | 4.9 cu. ft. refrigerator, glass door  | 1/ea |
| JLR404A  | JLR404A  | 4.9 cu. ft. refrigerator, solid door  | 1/ea |
| JRG2304A | JRG2304A | 23.3 cu. ft. refrigerator, glass door | 1/ea |
| JLR2304A | JLR2304A | 23.3 cu. ft. refrigerator, solid door | 1/ea |
| JRG3004A | JRG3004A | 29.2 cu. ft. refrigerator, glass door | 1/ea |
| JLR3004A | JLR3004A | 29.2 cu. ft. refrigerator, solid door | 1/ea |
| JRG5004A | JRG5004A | 51.1 cu. ft. refrigerator, glass door | 1/ea |
| JLR5004A | JLR5004A | 51.1 cu. ft. refrigerator, solid door | 1/ea |

## Refrigerators: General Laboratory



### Thermo Scientific Jewett® Pass-Thru Refrigerators

THERMO SCIENTIFIC - Jewett® pass-thru refrigerators offer convenience when multiple entry points are required.

| Cat. No. | Mfr. No. | Description               | Qty. |
|----------|----------|---------------------------|------|
| LR25D-1B | LR25D-1B | 24.8 cu. ft. refrigerator | 1/ea |
| LR55D-1B | LR55D-1B | 55 cu. ft. refrigerator   | 1/ea |

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### Thermo Scientific Revco® High-Performance Laboratory Refrigerators

THERMO SCIENTIFIC - Revco® high-performance refrigerators feature a microprocessor control system, positive airflow systems, industrial-quality cabinet construction and extra-strength refrigeration compressors that are ideal for industrial, clinical and scientific applications.

- Adjustable temperatures between 1°C and 8°C
- Automatic defrost and condensate removal
- Digital electronic technology designed to simplify operation and deliver greater accuracy using icon-based controls
- Large, easy-to-read digital temperature display within 0.1°C
- Graphic thermometer is steady green when temperature is normal, flashes top bar for overtemperature, flashes bulb for undervoltage
- Sensor automatically initiates defrost cycle on demand, eliminating need for a defrost timer, minimizing frost buildup and optimizing coil efficiency
- Audible/visual warnings for temperature deviations or power failure, remote alarm contacts
- Key-operated ON/OFF/ALARM ON master switch for setpoint security
- Alarm silence, ringback and auto reset
- Controller battery backup system



- Alarm setpoints are preset to warn of temperature deviation at 5.5°C overtemperature and 1.5°C undervoltage
- Positive forced-air circulation systems
- Industrial-grade cabinet construction and compressors
- High-density CFC-free urethane foam insulation
- Choice of solid or glass lockable doors
- Epoxy-coated, open-wire shelves adjustable in 1 in. (2.5cm) increments
- Cold-rolled steel interior and exterior finished with high-impact powder paint coating
- Interior lights with door-activated ON/OFF switch, independent switch on control panel, adjustable leveling feet (except 4.9 cu. ft. undercounter model)
- 45.8 cu. ft. (1297L) units have double sliding glass doors, base-mounted controls and refrigeration systems, independent switch-activated lights and dual-wheel 2 in. (5cm) casters instead of leveling feet
- Undercounter model has a 1 in. (2.5cm) dia. access port with plug
- NOTE: Chart recorders are optional, not standard

| Cat. No.  | Mfr. No. | Description                                 | Qty. |
|-----------|----------|---|------|
| RGL404A   | RGL404A  | 4.9 cu. ft. - glass door - 115V             | 1/ea |
| R3900-5A  | REL404A  | 4.9 cu. ft. - solid door - 115V             | 1/ea |
| RGL1204A  | RGL1204A | 11.5 cu. ft. - glass door - 115V            | 1/ea |
| REL1204-A | REL1204A | 11.5 cu. ft. - solid door - 115V            | 1/ea |
| RGL2304A  | RGL2304A | 23.3 cu. ft. - glass door - 115V            | 1/ea |
| REL2304-A | REL2304A | 23.3 cu. ft. - solid door - 115V            | 1/ea |
| REL3004-A | REL3004A | 29.2 cu. ft. - solid door - 115V            | 1/ea |
| REL4504-A | REL4504A | 45.8 cu. ft. - 2 glass sliding doors - 115V | 1/ea |
| RGL5004A  | RGL5004A | 51.1 cu. ft. - 2 glass doors - 115V         | 1/ea |
| REL5004-A | REL5004A | 51.1 cu. ft. - 2 solid doors - 115V         | 1/ea |

# Cold Storage

## Refrigerators: General Laboratory



### Premier Laboratory Refrigerators

NOR-LAKE SCIENTIFIC - NOR-LAKE® Premier Refrigerators are designed for heavy-duty use. They feature automatic defrost and digital LED microprocessor control with audible and visual high/low alarms with remote alarm contacts. The exterior front, sides and back are painted white. The exterior top and bottom are galvanized steel. The interior is white and there are three epoxy-coated shelves per door, which can be adjusted in 1 in. increments.

Refrigerator cabinet is formed-in-place with high-density polyurethane foam insulation. Doors have heavy-duty pivot hinges and pull handles with centered key locks and self-adjusting magnetic gaskets. These refrigerators feature top-mounted refrigeration, air-cooled condensing unit, automatic condensate evaporation and door-opening heaters (glass door models). There are six casters (three locking) on three-door models. Refrigerators are available with optional chart recorder, up to eight stainless steel drawers, up to six wire basket drawers, internal electrical outlet, lead access ports, stainless steel interior and exterior and extra shelves. UL/CUL listed. Warranties: 18-month parts and labor, 5-year compressor (US and Canada).

#### Specifications:

|                                       |                                   |
|---------------------------------------|-----------------------------------|
| Temperature range .....               | 2°C to 10°C factory preset at 4°C |
| Shelf area .....                      | 42.8 sq. ft.                      |
| Power requirements .....              | 115V, 60Hz                        |
| Interior dimensions (H x W x D) ..... | 59 x 78½ x 30 in.                 |
| Exterior dimensions (H x W x D) ..... | 79¾ x 82½ x 35½ in.               |

| Cat. No.          | Mfr. No.     | Description                | Qty. |
|-------------------|--------------|----------------------------|------|
| <b>NSPR803WWG</b> | NSPR803WWG/0 | 80 cu. ft. - 3 glass doors | 1/ea |
| <b>NSPR803WWW</b> | NSPR803WWW/0 | 80 cu. ft. - 3 solid doors | 1/ea |



### Premier Lab Refrigerator with Sliding Glass Doors

NOR-LAKE SCIENTIFIC - Designed to meet the demanding requirements of scientific and laboratory applications, this premier laboratory refrigerator features two sliding glass doors and a microprocessor control with digital LED display. Factory preset operating temperature is 4°C. Audible and visual alarms will alert you of temperature fluctuations. Remote alarm contacts are included.

The unit offers top-mounted refrigeration, an air-cooled condensing unit, automatic defrost and foamed-in-place, high-density polyurethane foam insulation. The exterior and interior are white and there are six epoxy-coated adjustable shelves. Doors have a self-closing and hold-open feature. Other features include fluorescent interior lighting, key locks and four casters (two locking). Refrigerators are also available with optional internal electrical outlet, chart recorder, access port and stainless steel interior and exterior. UL/CUL listed. Warranties: 18-month parts and labor, 5-year compressor (US and Canada).

#### Specifications:

|                                       |                                   |
|---------------------------------------|-----------------------------------|
| Shelf area .....                      | 26 sq. ft.                        |
| Temperature range .....               | 2°C to 10°C factory preset at 4°C |
| Power requirements .....              | 115V, 60Hz                        |
| Interior dimensions (H x W x D) ..... | 59 x 51 x 30 in.                  |
| Exterior dimensions (H x W x D) ..... | 79¾ x 55 x 34 in.                 |

| Cat. No.         | Mfr. No.     | Description             | Qty. |
|------------------|--------------|-------------------------|------|
| <b>LR502WWG0</b> | NSPR502WWG/0 | 52 cu. ft. refrigerator | 1/ea |

## Refrigerators: General Laboratory

### Premier Pass-Through Refrigerators

**NOR-LAKE SCIENTIFIC** - These laboratory refrigerators have a front and rear door, for two-sided access. They are available with one pair, two pairs or three pairs in a variety of configurations—glass front door(s) and solid back door(s), all-glass doors or all-solid doors. All models have a microprocessor control with high/low audible and visual alarms, remote alarm contacts and an LED digital display. The exterior front, solid doors and sides are white. The exterior top and bottom are galvanized steel.



The interior liner and door panel are white and there are three epoxy-coated shelves per door, which can be adjusted in 1 in. increments.

Cabinet and doors are formed-in-place with high-density polyurethane foam insulation. Doors have pull handles, key locks and self-adjusting magnetic gaskets. These refrigerators feature top-mounted refrigeration. There are four casters (two locking) on one- and two-door models.

UL/CUL-listed. CE Mark. Refrigerators are available with several optional features including extra shelves, two-way drawer wire baskets or two-way stainless steel drawers (on applicable models), chart recorder, lead access ports and stainless steel interior and exterior. Warranties: 18-month parts and labor, 5-year compressor (US and Canada).

#### Specifications:

Temperature range ..... 2°C to 10°C factory preset at 4°C  
Power requirement ..... 115V, 60 Hz

#### PT242WWF0

Shelf area ..... 12.8 sq. ft.  
Interior dimensions (H x W x D) ..... 59 x 23½ x 32 in.  
Exterior dimensions (H x W x D) ..... 79¾ x 27½ x 37¾ in.

#### PT554WWG0 and PT524WWF0

Shelf area ..... 28.6 sq. ft.  
Interior dimensions (H x W x D) ..... 59 x 51 x 32 in.  
Exterior dimensions (H x W x D) ..... 79¾ x 55 x 37¾ in.

#### NSPT806WWG and NSPT806WWF

Shelf area ..... 42.8 sq. ft.  
Interior dimensions (H x W x D) ..... 59 x 78½ x 32 in.  
Exterior dimensions (H x W x D) ..... 79¾ x 82½ x 37¾ in.

| Cat. No.                                | Mfr. No.     | Description            | Qty. |
|---|--------------|------------------------|------|
| <b>Glass front door solid back door</b> |              |                        |      |
| <b>PT554WWG0</b>                        | NSPT524WWG/0 | 55.7 cu. ft. - 2 doors | 1/ea |
| <b>NSPT806WWG</b>                       | NSPT806WWG/0 | 85.8 cu. ft. - 3 doors | 1/ea |
| <b>All glass doors</b>                  |              |                        |      |
| <b>PT242WWF0</b>                        | NSPT242WWF/0 | 25.6 cu. ft. - 1 door  | 1/ea |
| <b>PT524WWF0</b>                        | NSPT524WWF/0 | 55.7 cu. ft. - 2 doors | 1/ea |
| <b>NSPT806WWF</b>                       | NSPT806WWF/0 | 85.8 cu. ft. - 3 doors | 1/ea |

### Select™ Glass Door Laboratory Refrigerators

**NOR-LAKE SCIENTIFIC** - These refrigerators include a digital 4 x 20 character LCD display microprocessor temperature controller with audible and visual high/low temperature alarm, which can be tested. Remote alarm contacts. Door ajar alarm, visual and audible (volume adjustable). Sensor failure alarm. 100-event alarm logging. Password protection and adjustable alarm beep or constant on (keypad selectable). Door opening counter with 24-hour automatic reset.



Air-cooled condensing unit, top-mounted forced air refrigeration system and automatic defrost and condensate evaporation. Continuous product temperature display and low battery test switch with buzzer. Real-time date/time display. Digital calibration for air and product.

Three sensor system (two product, one air). Fan motor run time monitor. Defrost heater time monitor. Condenser/compressor run time monitor. Interior light, switch activated.

White exterior cabinet front, sides and back. Interior cabinet liner is also white. Exterior cabinet top and bottom are galvanized steel. Cabinet and solid doors are foamed-in-place with CFC-free high-density polyurethane foam insulation. Glass door(s), full size, double pane with pivot hinges and pull door handles. Magnetic door gaskets. Key door lock(s) (two keys). Three coated wire shelves per door section. Sensor access port, 1 in. diameter. Four casters on one- and two-door models. 2 to 10V DC output for product temperature (selectable to air temperature)

Warranties: 24-month parts and labor, 5-year compressor (US and Canada). UL/CUL listed.

#### Specifications:

Temperature control range ..... 2°C to 10°C factory preset at 4°C  
Power requirements ..... 115V, 1PH, 60Hz, NEMA plug 5-15P  
Interior dimensions (H x W x D) ..... 59 x 23½ x 30 in.  
Exterior dimensions (H x W x D) ..... 79¾ x 27½ x 35½ in.

| Cat. No.           | Mfr. No.     | Description             | Qty. |
|--------------------|--------------|-------------------------|------|
| <b>NSSR241WWG0</b> | NSSR241WWG/0 | 24 cu. ft. refrigerator | 1/ea |

If you don't see what you are looking for ... contact us.

If you don't see the product you are looking for, just pick up the phone and ask your sales or customer service representative to assist you. Visit our website at [cardinalhealth.com](http://cardinalhealth.com) for more information.

Customer Service: 800.964.5227

# Cold Storage

## Refrigerators: General Laboratory

### Select™ Solid Door Laboratory Refrigerators

NOR-LAKE SCIENTIFIC - These refrigerators include a digital 4 x 20 character LCD display microprocessor temperature controller with audible and visual high/low temperature alarm, which can be tested. Remote alarm contacts. Door ajar alarm, visual and audible (volume adjustable). Sensor failure alarm. 100-event alarm logging. Password protection and adjustable alarm beep or constant on (keypad selectable). Door opening counter with 24-hour automatic reset.

Air-cooled condensing unit, top-mounted forced air refrigeration system and automatic defrost and condensate evaporation. Continuous product temperature display and low battery test switch with buzzer. Real time date/time display. Digital calibration for air and product. Three sensor system (two product, one air). Fan motor run time monitor. Defrost time monitor. Condenser/compressor run time monitor. Interior light, switch-activated.

White exterior cabinet front, sides and back. Exterior cabinet top and bottom are galvanized steel. Interior cabinet liner and interior door panel are painted white. Cabinet and solid doors are foamed-in-place with CFC-free high-density polyurethane foam insulation. Heavy-duty solid door(s) with pivot hinges and full length pull door handle(s). Magnetic door gaskets. Centered key door lock(s) (two keys). Three coated wire shelves per door section. Sensor access port, 1 in. diameter. Four casters on one- and two-door models (two locking). 2 to 10V DC output for product temperature (selectable to air temperature).

Warranties: 24-month parts and labor, 5-year compressor (US and Canada). UL/CUL listed.

#### Specifications:

Temperature control range ..... 2°C to 10°C factory preset at 4°C  
Power requirements ..... 115V, 1PH, 60Hz, NEMA plug 5-15P

#### NSSR241WW0

Interior dimensions (H x W x D) ..... 59 x 23½ x 30 in.  
Exterior dimensions (H x W x D) ..... 79¾ x 27½ x 34¾ in.

#### NSSR331WW0

Interior dimensions (H x W x D) ..... 67 x 27¾ x 31 in.  
Exterior dimensions (H x W x D) ..... 87¾ x 31¾ x 35¾ in.

#### NSSR522WW0

Interior dimensions (H x W x D) ..... 59 x 51 x 30 in.  
Exterior dimensions (H x W x D) ..... 79¾ x 55 x 34¾ in.



### Large Capacity Laboratory Refrigerators

PANASONIC - Stable and reliable refrigerated environment for exacting laboratory requirements. Ideal temperature environment for clinical research, pharmaceutical and industrial use. Adjustable shelves and wide range setpoint for varying laboratory applications including chromatography and pharmaceutical storage. Features include:

- Temperature stability
- Wide temperature range
- Speedy and powerful refrigeration
- Easy-to-manage layout
- Standard alarm and safety features
- HFC-refrigerant and CFC-free insulation
- Large fans

#### Specifications:

Temperature range ..... 2°C to 23°C

#### MPR-721

Interior dimensions (W x D x H) ... 25.6 x 28 x 59.1 in.  
Exterior dimensions (W x D x H) ... 30.3 x 36.2 x 77 in.  
Shelves ..... 4 polyethylene-coated wire

#### MPR-721R

Interior dimensions (W x D x H) ... 25.6 x 28 x 59.1 in.  
Exterior dimensions (W x D x H) ... 30.3 x 36.2 x 77 in.  
Drawers ..... 5 coated steel, handles w/card holder

#### MPR-1411

Interior dimensions (W x D x H) ... 52 x 28 x 59.1 in.  
Exterior dimensions (W x D x H) ... 56.7 x 36.2 x 76.8 in.  
Shelves ..... 8 polyethylene-coated wire

#### MPR-1411R

Interior dimensions (W x D x H) ... 52 x 28 x 59.1 in.  
Exterior dimensions (W x D x H) ... 56.7 x 36.2 x 76.8 in.  
Drawers ..... 10 coated steel, handles w/card holder

| Cat. No.          | Mfr. No.     | Description                      | Qty. |
|-------------------|--------------|----------------------------------|------|
| <b>NSSR241WW0</b> | NSSR241WWW/0 | 24 cu. ft. - 12.83 shelf sq. ft. | 1/ea |
| <b>NSSR331WW0</b> | NSSR331WWW/0 | 33 cu. ft. - 15.85 shelf sq. ft. | 1/ea |
| <b>NSSR522WW0</b> | NSSR522WWW/0 | 52 cu. ft. - 28.6 shelf sq. ft.  | 1/ea |

| Cat. No.            | Mfr. No.  | Description               | Qty. |
|---------------------|-----------|---------------------------|------|
| <b>Single doors</b> |           |                           |      |
| <b>MPR-721</b>      | MPR-721   | 24.2 cu. ft. - 4 shelves  | 1/ea |
| <b>MPR-721R</b>     | MPR-721R  | 23.7 cu. ft. - 5 drawers  | 1/ea |
| <b>Double doors</b> |           |                           |      |
| <b>MPR-1411</b>     | MPR-1411  | 48.4 cu. ft. - 8 shelves  | 1/ea |
| <b>MPR-1411R</b>    | MPR-1411R | 48.2 cu. ft. - 10 drawers | 1/ea |

## Refrigerators: General Laboratory

### Undercounter Laboratory Refrigerators

PANASONIC - These units provide compact refrigeration and are ideal for freestanding use or for use under the bench in clinical, life science, pharmaceutical, biotechnology and industrial laboratories. The units feature quiet operation and use HFC refrigerant R-134a. Three adjustable wire shelves help to maximize storage. SRL4110WSE includes a door lock for security. Refrigerators SR-L4110W and SRL4110WSE have a temperature control thermodial located inside the refrigerator chamber.



SR-L4110W model shown

#### Specifications:

Power requirements ..... 115V, 60 Hz, 0.9A

#### SR-L4110W/SRL4110WSE

Temperature range ..... -5° to +8°C

Exterior dimensions (W x D x H) ..... 21.4 x 22.8 x 33.8 in.

| Cat. No.          | Mfr. No.        | Description           | Qty. |
|-------------------|-----------------|-----------------------|------|
| <b>SR-L4110W</b>  | SR-L4110W-PA    | 4.9 cu. ft.           | 1/ea |
| <b>SRL4110WSE</b> | SR-L4110WSEC-PA | 4.9 cu. ft. with lock | 1/ea |

### Undercounter Laboratory Refrigerator

PANASONIC - This undercounter refrigerator features a microprocessor controller with digital display to regulate temperature. An alarm notifies you if the temperature deviates more than 3°C from the setpoint. A door ajar alarm features a delay timer to help eliminate nuisance alarms. Forced air circulation in the cabinet enables the unit to quickly restore temperature uniformity after door openings. The unit also includes remote alarm contacts to connect to a centralized alarm monitoring system and a door lock for security.



SRL6111W model shown

#### Specifications:

Power requirements ..... 115V, 60 Hz, 0.9A

Temperature range ..... 1° to 14°C

Exterior dimensions (W x D x H) ..... 23.6 x 22.5 x 34.5 in.

| Cat. No.        | Mfr. No.     | Description           | Qty. |
|-----------------|--------------|-----------------------|------|
| <b>SRL6111W</b> | SR-L6111W-PA | 6.1 cu. ft. with lock | 1/ea |

## Is it worth it?

The long hours in the lab.

The hard work.

The attention to detail.

The dedication.

The patience ...

The patients.

The thought that I can help people live longer, healthier lives.

Yes.

**Yes, it's worth it.**



# Cold Storage

## Refrigerators: Blood Bank

### Premier Series

#### Blood Bank Refrigerators

**CARDINAL HEALTH** - Our blood bank refrigerators are designed to meet strict requirements established by the AABB, ANRC and FDA for storage of whole blood and blood components. The complete selection of +4°C refrigerators feature simplified push-button alarm test functions and reliable, field-proven refrigeration systems designed for the most demanding applications.

- Powerful industrial compressors
- Thick CFC-free insulation
- Access port standard
- Adjustable temperature setpoint
- Adjustable temperature alarms
- Built-in contacts for remote alarms
- Self-closing doors
- Adjustable steel drawers
- Built-in chart recorder (freestanding on 4.9 cu. ft.)
- Automatic alarm test
- Additional lower temperature probe
- Smart defrost for temperature stability

UL certified.



**Temperature range: +1°C to +8°C, factory pre-set to +4°C (auto defrost)**

| Cat. No.   | Cu. Ft.<br>(Bag capacity) | Voltage (Hz) | Amps/<br>Breaker<br>(Plug) | Cabinet      | Door          | Drawers | Int. Dimensions*  |                    | Ext. Dimensions* |     | Ship<br>Weight lbs. |
|------------|---------------------------|--------------|----------------------------|--------------|---------------|---------|-------------------|--------------------|------------------|-----|---------------------|
|            |                           |              |                            |              |               |         | H x D x W in.     | H x D x W in.      |                  |     |                     |
| R3863-4A   | 4.9 (64)                  | 115 (60)     | 8.0/15 (P1)                | Undercounter | Single, solid | 2       | 20 x 20.5 x 20    | 33.4 x 26 x 24     | 79.2 x 36.4 x 28 | 220 |                     |
| R3840-3A   | 11.5 (92)                 | 115 (60)     | 9.4/15 (P1)                | Space saver  | Single, glass | 6       | 52.4 x 21.75 x 20 | 73.6 x 29.4 x 24   | 79.2 x 36.4 x 28 | 320 |                     |
| R3840-5A   | 23.3 (385)                | 115 (60)     | 9.4/15 (P1)                | Upright      | Single, glass | 7       | 58 x 29 x 24      | 79.2 x 36.4 x 28   | 470              |     |                     |
| R3840-5D   | 23.3 (385)                | 208/230 (60) | 6.0/15 (P4)                | Upright      | Single, glass | 7       | 58 x 29 x 24      | 79.2 x 36.4 x 28   | 470              |     |                     |
| R3840-6A   | 29.2 (426)                | 115 (60)     | 9.4/15 (P1)                | Upright      | Single, glass | 6       | 58 x 29 x 30      | 79.2 x 36.4 x 34   | 505              |     |                     |
| TFSSBB304D | 29.2 (426)                | 208/230 (60) | 6.0/15 (P4)                | Upright      | Single, glass | 6       | 58 x 29 x 30      | 79.2 x 36.4 x 34   | 505              |     |                     |
| R3840-10A  | 51.1 (770)                | 115 (60)     | 15/20 (P2)                 | Upright      | Double, glass | 14      | 58 x 29 x 52.5    | 79.2 x 36.4 x 56.5 | 640              |     |                     |
| R3840-10D  | 51.1 (770)                | 208/230 (60) | 8.0.5/15 (P4)              | Upright      | Double, glass | 14      | 58 x 29 x 52.5    | 79.2 x 36.4 x 56.5 | 640              |     |                     |

\* Published interior volumes are nominal; useable cu. ft. capacities may be offset by shelves, drawers, blower coils or cabinet protrusions. For specific cabinet dimensions and allowances, or for verification of clearance tolerances, contact our sales representatives. Product performance may be affected by ambient temperature conditions, humidity conditions, sample loading preferences and frequency of door openings. Contact our sales representatives for specific inquiries regarding your application.

### Thermo Scientific Jewett® High-Performance Blood Bank Refrigerators

THERMO SCIENTIFIC - Jewett® high-performance blood bank refrigerators provide fast pull-down, rapid temperature recovery and outstanding +4°C temperature uniformity for refrigerated blood and blood products.

Jewett® high-performance blood bank refrigerators are designed to provide years of reliable performance and to meet the strict requirements established by the AABB, ANRC, FDA and other international agencies. Units hold 64 to 770 bags (depending on model), maintain a consistent temperature and quickly recover setpoint temperature after the door has been opened and closed.

- Operating temperature 2°C to 4°C (factory preset at 4°C)
- Microprocessor control
- High-density CFC-free, blown-in insulation
- Powerful, industrial-grade compressors
- 1 in. insulated access port
- Positive, forced-air circulation
- Set of four 2 in. casters: two locking and two regular
- Spring-loaded, self-closing doors with 90° stay-open feature with lockable doors for added sample security
- Hospital-grade plug
- Standard inkless, 7-day graphic chart recorder
- Environmentally friendly, mercury-free, LED interior lighting
- Standard safety glass, double-pane doors (solid undercounter door)
- Adjustable stainless-steel drawers



| Cat. No.        | Mfr. No. | Description               | Qty. |
|-----------------|----------|---------------------------|------|
| <b>JBB404A</b>  | JBB404A  | 4.9 cu. ft. refrigerator  | 1/ea |
| <b>JBB1204A</b> | JBB1204A | 11.5 cu. ft. refrigerator | 1/ea |
| <b>JBB2304A</b> | JBB2304A | 23.3 cu. ft. refrigerator | 1/ea |
| <b>JBB3004A</b> | JBB3004A | 29.2 cu. ft. refrigerator | 1/ea |
| <b>JBB5004A</b> | JBB5004A | 51.1 cu. ft. refrigerator | 1/ea |



### Thermo Scientific Jewett® Pass-Thru Blood Bank Refrigerator

THERMO SCIENTIFIC - Jewett® pass-thru blood bank refrigerators offer convenience when multiple entry points are required.

| Cat. No.         | Mfr. No.  | Description   | Qty. |
|------------------|-----------|---|------|
| <b>BBR25D-1B</b> | BBR25D-1B | 24.8 cu. ft. - HemaPro 2000 temp. surveillance module | 1/ea |

# Cold Storage

## Refrigerators: Blood Bank

### Thermo Scientific Revco® Blood Bank Refrigerators

THERMO SCIENTIFIC - Revco® high-performance blood bank refrigerators are designed to meet strict requirements established by the AABB, ANRC and FDA for storage of whole blood and blood components.

They feature microprocessor control systems, positive airflow systems, industrial-quality cabinet construction and extra-strength refrigeration compressors designed for industrial, clinical and scientific use.

Positive, forced-air circulation maintains temperature uniformity throughout. Directional airflow assures quick recovery after door is opened. High-density, CFC-free urethane foam insulation protects cabinet from ambient temperature fluctuations and minimizes operating costs.

Heavy-duty, industrial-grade, hermetically sealed compressors. Automatic condensate removal and defrost. Digital electronic technology designed to simplify operation and deliver greater accuracy. Factory-preset temperature setpoint at 4°C. Adjustable temperatures between 1°C and 8°C.

Icon-based controls. Large, digital display that shows temperature within 0.1°C. Graphic thermometer shows steady green for normal temperature, flashes top bar for overtemperature and flashes bulb for undertemperature.

- Sensor automatically initiates defrost cycle on demand, eliminating need for a timer, minimizing frost buildup and optimizing coil efficiency
- Key-operated ON/OFF/ALARM ON master switch for setpoint security; audible/visual warnings for temperature deviations or power failure
- Alarm silence, ringback and auto reset and remote alarm contacts
- Controller battery backup system
- Lockable doors self-close against closed-cell peripheral gasket



- Dual-pane glass viewing door(s) insulated to prevent condensation
- Adjustable, full-extension, stainless steel drawers
- Interior cabinet lights (except undercounter model)
- Door-activated ON/OFF switch and independent switch on panel
- Undercounter model (solid door) and 1 in. dia. access port with plug

| Cat. No.  | Mfr. No.  | Description                      | Qty. |
|-----------|-----------|----------------------------------|------|
| R3900-6A  | REB404A   | 4.9 cu. ft. refrigerator - 115V  | 1/ea |
| REB1204-A | REB1204A  | 11.5 cu. ft. refrigerator - 115V | 1/ea |
| REB2304-A | REB2304-A | 23.3 cu. ft. refrigerator - 115V | 1/ea |
| REB5004-A | REB5004A  | 51.1 cu. ft. refrigerator - 115V | 1/ea |

### Blood Bank Refrigerators

NOR-LAKE SCIENTIFIC - These blood bank refrigerators feature an industrial-quality cabinet with a heavy-duty refrigeration system to help you maintain your valuable materials.

Available with one or two full-size glass doors with a variety of monitoring instrumentation. Air-temperature probe with high/low alarms, two product temperature probes with high/low alarms, a 7-day electric chart recorder with battery backup, power failure alarm, continuous LCD display of air and product temperatures, two levels of user password protection and 100-event alarm logging with date/time stamp and product temperatures.



All models feature a streamlined unit cooler design that optimizes capacity and helps improve airflow and uniformity. Other features include air-cooled condensing unit, automatic condensate evaporation, microprocessor PLC control with digital display, automatic defrost, fluorescent interior lighting and doorframe heaters.

The cabinet is foamed-in-place with high-density polyurethane insulation. The exterior front is white baked enamel. The exterior top and bottom are galvanized steel. The interior is painted white and there are eight stainless-steel drawers per door. Self-closing double-pane glass doors have heavy-duty pivot hinges and pull handles with key lock and self-adjusting magnetic gaskets. Four casters (two locking) on one- and two-door models, six casters (three locking) on three-door models. Preset at 4°C. UL/CUL listed. Meets AARB, ANRC and FDA requirements. Warranties: 18-month parts and labor, 5-year compressor (US and Canada).

#### Specifications:

Temperature range.....1°C to 6°C

Power requirement .....115V, 60 Hz

#### BR241WWG0

Interior dimensions (H x W x D) .....59 x 23½ x 30 in.

Exterior dimensions (H x W x D) .....79¾ x 27½ x 35½ in.

#### BR522WWG0

Interior dimensions (H x W x D) .....59 x 51 x 30 in.

Exterior dimensions (H x W x D) .....79¾ x 55 x 35½ in.

#### NSBR803WW

Interior dimensions (H x W x D) .....59 x 78½ x 30 in.

Exterior dimensions (H x W x D) .....79¾ x 82½ x 35½ in.

| Cat. No.   | Mfr. No.     | Description          | Qty. |
|------------|--------------|----------------------|------|
| BR241WWG0  | NSBR241WWG/0 | 24 cu. ft. - 1 door  | 1/ea |
| BR522WWG0  | NSBR522WWG/0 | 52 cu. ft. - 2 doors | 1/ea |
| NSBR803WWG | NSBR803WWG/0 | 80 cu. ft. - 3 doors | 1/ea |

### Undercounter Blood Bank Refrigerator

NOR-LAKE SCIENTIFIC - Designed for blood banking, this refrigerator has an industrial-quality cabinet and a heavy-duty refrigeration system. It can be built-in on three sides, as the air intake and exhaust is through the base in front. The unit offers digital LED display microprocessor temperature controller, high/low product alarm, remote contacts and a freestanding temperature chart recorder. The exterior is painted white enamel and the back and bottom are made of galvanized steel; interior liner and door panel are aluminum. There is one adjustable gray epoxy-coated wire shelf.



The refrigerator features a base-mount refrigeration system, an air-cooled condensing unit with an expansion-valve refrigeration system, automatic defrost, four 4 in. legs, magnetic door gasket, pull handle and key door lock, 1 in. diameter sensor access port, four 4 in. legs. Casters are optional. The cabinet and door are foamed-in-place with high-density polyurethane foam insulation. Operating temperature is 4°C. UL/CUL listed. Meets AABB, ANRC and FDA requirements for blood storage. 18-month parts and labor, 5-year compressor (US and Canada) warranty.

#### Specifications:

|                                       |                               |
|---------------------------------------|-------------------------------|
| Shelf area.....                       | 2.66 sq. ft.                  |
| Temperature range.....                | 2° to 8°C                     |
| Adjustable height.....                | 34 to 35 1/4 in. (86 to 89cm) |
| Interior dimensions (H x W x D) ..... | 22 5/8 x 23 x 19 1/2 in.      |
| Exterior dimensions (H x W x D).....  | 34 x 27 x 25 in.              |
| Power requirements .....              | 115V, 60 Hz                   |

| Cat. No.         | Mfr. No.     | Description              | Qty. |
|------------------|--------------|--------------------------|------|
| <b>BR051WMW0</b> | NSBR051WMW/0 | 5.1 cu. ft. refrigerator | 1/ea |



### Blood Bank Refrigerators

PANASONIC - Panasonic blood bank refrigerators are designed to conform to AABB criteria with a highly efficient compressor that provides superior temperature recovery, rapid cooling and quiet performance for each model. Designed with all the features for blood product preservation such as superior uniformity, microprocessor control and large flexible storage capacity. Ideally suited for whole blood storage with stable and reliable temperature control for various inventory loads.

#### Features:

- Stable temperature control
- Roll-out drawers, Plexiglas® inner doors
- Forced air circulation for enhanced temperature stability
- User-friendly design
- Temperature monitoring features
- The ideal +4°C environment for safe and reliable storage of whole blood

#### Specifications:

|                        |   |
|------------------------|---|
| Temperature range..... | 4°C ±1°C (ambient temperature 35°C)           |
| Temperature alarm..... | High, 6°C; low, 2°C; audible and visual alarm |

#### Storage capacity

|                 |                  |
|-----------------|------------------|
| MBR-107DH ..... | 32 (450mL bags)  |
| MBR-304GR.....  | 120 (450mL bags) |
| MBR-704GR.....  | 360 (450mL bags) |
| MBR-1405GR..... | 720 (450mL bags) |

| Cat. No.          | Mfr. No.   | Description                        | Qty. |
|-------------------|------------|------------------------------------|------|
| <b>MBR-107DH</b>  | MBR-107DH  | 2.8 cu. ft. - 4 shelves            | 1/ea |
| <b>MBR-304GR</b>  | MBR-304GR  | 10.6 cu. ft. - 5 roll-out drawers  | 1/ea |
| <b>MBR-704GR</b>  | MBR-704GR  | 21.8 cu. ft. - 6 roll-out drawers  | 1/ea |
| <b>MBR-1405GR</b> | MBR-1405GR | 45.4 cu. ft. - 12 roll-out drawers | 1/ea |



# Cold Storage

## Refrigerators: Chromatography

### Premier Series Chromatography Refrigerators

**CARDINAL HEALTH** - Our chromatography refrigerators are designed for a variety of applications requiring close temperature control, full access to chromatography instrumentation and easy setup of instrumentation and apparatus within the chamber.

- Powerful industrial compressors
- Thick CFC-free insulation
- 2 large access ports standard
- Adjustable temperature setpoint
- Adjustable temperature alarms
- Built-in contacts for remote alarms
- Self-closing doors
- Adjustable shelves
- Smart defrost for temperature stability
- Duplex interior plug

UL certified.



**Temperature range: +1°C to +8°C, factory pre-set to +4°C (auto defrost)**

| Cat. No.  | Cu. Ft. | Voltage (Hz) | Amps/<br>Breaker<br>(Plug) |         |                          | Shelves<br>(Full/Half) | Int. Dimensions*<br>H x D x W in. | Ext. Dimensions*<br>H x D x W in. | Ship<br>Weight lbs. |
|-----------|---------|--------------|----------------------------|---------|--------------------------|------------------------|-----------------------------------|-----------------------------------|---------------------|
|           |         |              |                            | Cabinet | Door                     |                        |                                   |                                   |                     |
| R3865-1A  | 23.3    | 115 (60)     | 9.4/15 (P1)                | Upright | Single, glass            | 0/2                    | 58 x 29 x 24                      | 79.2 x 36.4 x 28                  | 425                 |
| R3865-1D  | 23.3    | 208/230 (60) | 6.0/15 (P4)                | Upright | Single, glass            | 0/2                    | 58 x 29 x 24                      | 79.2 x 36.4 x 28                  | 425                 |
| CC304A    | 29.2    | 115 (60)     | 9.4/15 (P1)                | Upright | Single, glass            | 0/2                    | 58 x 29 x 30                      | 79.2 x 36.4 x 34                  | 435                 |
| CC304D    | 29.2    | 208/230 (60) | 6.0/15 (P4)                | Upright | Single, glass            | 0/2                    | 58 x 29 x 30                      | 79.2 x 36.4 x 34                  | 435                 |
| CC454AB   | 45.8    | 115 (60)     | 15.0/20 (P2)               | Upright | Double,<br>sliding glass | 4/2                    | 58 x 26 x 52.5                    | 79.1 x 34.5 x 56.5                | 670                 |
| CC454D    | 45.8    | 208/230 (60) | 8.0.5/15 (P4)              | Upright | Double,<br>sliding glass | 4/2                    | 58 x 26 x 52.5                    | 79.1 x 34.5 x 56.5                | 670                 |
| R3865-5A  | 51.1    | 115 (60)     | 15/20 (P2)                 | Upright | Double, glass            | 4/2                    | 58 x 29 x 52.5                    | 79.1 x 36.4 x 56.5                | 580                 |
| R3865-5D  | 51.1    | 208/230 (60) | 8.0.5/15 (P4)              | Upright | Double, glass            | 4/2                    | 58 x 29 x 52.5                    | 79.1 x 36.4 x 56.5                | 580                 |
| R3865-10A | 78.8    | 115 (60)     | 16.0/20 (P2)               | Upright | Triple, glass            | 8/2                    | 58 x 29 x 81                      | 79.2 x 36.4 x 85                  | 965                 |
| R3865-10D | 78.8    | 208/230 (60) | 10.5/15 (P4)               | Upright | Triple, glass            | 8/2                    | 58 x 29 x 81                      | 79.2 x 36.4 x 85                  | 965                 |

\* Published interior volumes are nominal; useable cu. ft. capacities may be offset by shelves, drawers, blower coils or cabinet protrusions. For specific cabinet dimensions and allowances, or for verification of clearance tolerances, contact our sales representatives. Product performance may be affected by ambient temperature conditions, humidity conditions, sample loading preferences and frequency of door openings. Contact our sales representatives for specific inquiries regarding your application.

### Pro Series Chromatography Refrigerators

**CARDINAL HEALTH** - Designed for a variety of applications requiring close temperature control, our chromatography refrigerators deliver stable temperatures over a range of +1°C to +12°C.

- Internal duplex outlet; two external side access ports
- Full featured alarm system
- Glass doors for easy viewing of content

UL certified.



**Temperature range: +1°C to +12°C, preset to +4°C (auto defrost)**

| Cat. No.   | Cu. Ft. | Voltage (Hz) | Finish          | Door  | Chart Recorder | Shelves | Int. Dimensions      |  | Ext. Dimensions H x D x W in. | Ship Weight lbs. |
|------------|---------|--------------|-----------------|-------|----------------|---------|----------------------|--|-------------------------------|------------------|
|            |         |              |                 |       |                |         | H x D x W in.        |  |                               |                  |
| MH30PAGAEE | 27      | 115 (60)     | Painted         | Glass | No             | 4       | 61.75 x 27 x 28.5    |  | 78 x 32 x 30                  | 300              |
| MH30PAGARE | 27      | 115 (60)     | Painted         | Glass | Yes            | 4       | 61.75 x 27 x 28.5    |  | 78 x 32 x 30                  | 300              |
| MH30SSGAEE | 27      | 115 (60)     | Stainless steel | Glass | No             | 4       | 61.75 x 27 x 28.5    |  | 78 x 32 x 30                  | 300              |
| MH30SSGARE | 27      | 115 (60)     | Stainless steel | Glass | Yes            | 4       | 61.75 x 27 x 28.5    |  | 78 x 32 x 30                  | 300              |
| MH38PAGAEE | 38      | 115 (60)     | Painted         | Glass | No             | 8       | 61.75 x 40.5 x 27    |  | 78 x 32 x 43.5                | 524              |
| MH38PAGARE | 38      | 115 (60)     | Painted         | Glass | Yes            | 8       | 61.75 x 40.5 x 27    |  | 78 x 32 x 43.5                | 524              |
| MH45PAGAEE | 45      | 115 (60)     | Painted         | Glass | No             | 8       | 61.75 x 48.63 x 27   |  | 78 x 32 x 52                  | 561              |
| MH45PAGARE | 45      | 115 (60)     | Painted         | Glass | Yes            | 8       | 61.75 x 48.63 x 27   |  | 78 x 32 x 52                  | 561              |
| MH45SSGAEE | 45      | 115 (60)     | Stainless steel | Glass | No             | 8       | 61.75 x 48.63 x 27   |  | 78 x 32 x 52                  | 561              |
| MH45SSGARE | 45      | 115 (60)     | Stainless steel | Glass | Yes            | 8       | 61.75 x 48.63 x 27   |  | 78 x 32 x 52                  | 561              |
| MH49PAGAEE | 49      | 115 (60)     | Painted         | Glass | No             | 8       | 61.75 x 48.63 x 28.5 |  | 78 x 32 x 52                  | 597              |
| MH49PAGARE | 49      | 115 (60)     | Painted         | Glass | Yes            | 8       | 61.75 x 48.63 x 28.5 |  | 78 x 32 x 52                  | 597              |
| MH49SSGAEE | 49      | 115 (60)     | Stainless steel | Glass | No             | 8       | 61.75 x 48.63 x 28.5 |  | 78 x 32 x 52                  | 597              |
| MH49SSGARE | 49      | 115 (60)     | Stainless steel | Glass | Yes            | 8       | 61.75 x 48.63 x 28.5 |  | 78 x 32 x 52                  | 597              |
| MH72PAGAEE | 72      | 115 (60)     | Painted         | Glass | No             | 12      | 61.75 x 72 x 28.5    |  | 78 x 32 x 75                  | 730              |
| MH72PAGARE | 72      | 115 (60)     | Painted         | Glass | Yes            | 12      | 61.75 x 72 x 28.5    |  | 78 x 32 x 75                  | 730              |
| MH72SSGAEE | 72      | 115 (60)     | Stainless steel | Glass | No             | 12      | 61.75 x 72 x 28.5    |  | 78 x 32 x 75                  | 730              |
| MH72SSGARE | 72      | 115 (60)     | Stainless steel | Glass | Yes            | 12      | 61.75 x 72 x 28.5    |  | 78 x 32 x 75                  | 730              |

# Cold Storage

## Refrigerators: Chromatography

### Thermo Scientific Revco® High-Performance Chromatography Refrigerators

THERMO SCIENTIFIC - Chromatography refrigerators are designed for a variety of applications requiring close temperature control.

Revco® high-performance chromatography refrigerators feature a microprocessor control system, positive airflow systems, industrial-quality cabinet construction and extra-strength refrigeration compressors selected for industrial, clinical and scientific use. Two 2 in. dia. (5.1cm) access ports with hinged covers allow full access to chromatography instrumentation and easy setup of instrumentation and apparatus within the chamber.

Adjustable temperatures between 1°C and 8°C, factory-preset setpoint at 4°C. CFC-free refrigerant. Positive forced-air circulation maintains temperature uniformity at all shelf levels. Peripheral closed-cell door gaskets maintain temperature integrity and automatic condensate removal and defrost.

Digital electronic technology designed to simplify operation and deliver greater accuracy. Instrumentation and controls mounted at cabinet bottom on 45.8 cu. ft. models, top on other models. Icon-based controls with large, easy-to-read digital display that shows temperature within 0.1°C.

Graphic thermometer is green when temperature is normal, flashes top bar for overtemperature, flashes bulb for undertemperature. Sensor automatically initiates defrost cycle on demand, eliminating need for a defrost timer, minimizing frost buildup and optimizing coil efficiency.

Audible/visual warnings for temperature deviations or power failure, remote alarm contacts. Key-operated ON/OFF/ALARM ON master switch for setpoint security. Alarm silence, ringback and auto reset; controller battery backup. Alarm setpoints are preset to warn of temperature deviation at 5.5°C overtemperature, 1.5°C undertemperature.

Cold-rolled steel surfaces finished with high-impact, powder-paint coating. Multipane sliding glass doors (45.8 cu. ft. models), key-locked swinging doors with spring-loaded closures on others stay open at 90°. Adjustable epoxy-coated, open-wire shelves. Dual-wheel casters.



NOTE: Chart recorders are optional, not standard.

| Cat. No.  | Mfr. No. | Description               | Qty. |
|-----------|----------|---------------------------|------|
| REC2304-A | REC2304A | 23.3 cu. ft refrigerator  | 1/ea |
| REC3004-A | REC3004A | 29.2 cu. ft. refrigerator | 1/ea |
| REC4504-A | REC4504A | 45.8 cu. ft. refrigerator | 1/ea |
| REC7504-A | REC7504A | 78.8 cu. ft. refrigerator | 1/ea |



### Expertise

**Cardinal Health is an experienced, dependable partner that knows the lab business and solves problems.**

- **60 years of experience serving laboratories.**
- **Dependable service, with tenured representatives who are committed to understanding and attending to customers' needs.**
- **Sales representatives who help educate lab managers about their options with comparative information about different manufacturers and products.**
- **Specialty customer service team that manages high-volume, high-value and perishable materials.**
- **Extensive supply chain and logistics expertise.**

### Premier Series Pharmacy Refrigerators

**CARDINAL HEALTH** - Configured for accurate storage and easy retrieval of pharmacy products, our pharmacy refrigerators feature full-extension stainless steel roll-out drawers. Developed for stable temperature control over a range of +1°C to +8°C.

- Powerful industrial compressors
- Thick CFC-free insulation
- Access ports standard
- Adjustable temperature setpoint
- Adjustable temperature alarms
- Built-in contacts for remote alarms
- Self-closing doors
- Adjustable steel drawers
- Smart defrost for temperature stability

UL certified.



**Temperature range: +1°C to +8°C, factory pre-set to +4°C (auto defrost)**

| Cat. No.  | Cu. Ft. | Voltage (Hz) | Amps/<br>Breaker<br>(Plug) |         |               | Drawers | Int. Dimensions* | Ext. Dimensions*   | Ship<br>Weight lbs. |
|-----------|---------|--------------|----------------------------|---------|---------------|---------|------------------|--------------------|---------------------|
|           |         |              |                            | Cabinet | Door          |         |                  |                    |                     |
| R3872-1A  | 23.3    | 115 (60)     | 9.4/15 (P1)                | Upright | Single, glass | 6       | 58 x 29 x 24     | 79.2 x 36.4 x 28   | 470                 |
| R3872-1D  | 23.3    | 208/230 (60) | 6.0/15 (P4)                | Upright | Single, glass | 6       | 58 x 29 x 24     | 79.2 x 36.4 x 28   | 470                 |
| TFSPR304A | 29.2    | 115 (60)     | 9.4/15 (P1)                | Upright | Single, glass | 6       | 58 x 29 x 30     | 79.2 x 36.4 x 34   | 505                 |
| TFSPR304D | 29.2    | 208/230 (60) | 6.0/15 (P4)                | Upright | Single, glass | 6       | 58 x 29 x 30     | 79.2 x 36.4 x 34   | 505                 |
| R3872-5A  | 51.1    | 115 (60)     | 15.0/20 (P2)               | Upright | Double, glass | 12      | 58 x 29 x 52.5   | 79.2 x 36.4 x 56.5 | 640                 |
| R3872-5D  | 51.1    | 208/230 (60) | 8.0.5/15 (P4)              | Upright | Double, glass | 12      | 58 x 29 x 52.5   | 79.2 x 36.4 x 56.5 | 640                 |

\* Published interior volumes are nominal; useable cu. ft. capacities may be offset by shelves, drawers, blower coils or cabinet protrusions. For specific cabinet dimensions and allowances, or for verification of clearance tolerances, contact our sales representatives. Product performance may be affected by ambient temperature conditions, humidity conditions, sample loading preferences and frequency of door openings. Contact our sales representatives for specific inquiries regarding your application.

# Cold Storage

## Refrigerators: Pharmacy

### Thermo Scientific Jewett® High-Performance Pharmacy Refrigerators

THERMO SCIENTIFIC - Jewett® high-performance pharmacy refrigerators are configured for accurate storage and easy retrieval of pharmacy products. Feature full-extension, stainless steel rollout drawers and standard glass doors. Developed for stable temperature control over a range of 1° to 8°C, these high-performance refrigerators are available in three sizes.

- High-density, CFC-free, blown-in insulation conforms to cabinet shape to reduce gaps and increase temperature uniformity
- Powerful, industrial-grade compressors for optimal product protection
- 1 in. (2.5cm) insulated access port standard
- Positive, forced-air circulation maintains temperature uniformity throughout the cabinet
- Spring-loaded, self-closing, lockable doors with 90° stay-open feature
- Hospital-grade plug
- Optional, inkless, 7-day chart recorder
- Bright temperature display
- Microprocessor control system with audio and visual alarms
- Environmentally friendly, mercury-free, LED interior lighting
- Safety glass, double-pane doors
- Adjustable stainless-steel drawers



| Cat. No. | Mfr. No. | Description               | Qty. |
|----------|----------|---------------------------|------|
| JPR2304A | JPR2304A | 23.3 cu. ft. refrigerator | 1/ea |
| JPR3004A | JPR3004A | 29.2 cu. ft. refrigerator | 1/ea |
| JPR5004A | JPR5004A | 51.1 cu. ft. refrigerator | 1/ea |

### Thermo Scientific Revco® High-Performance Pharmacy Refrigerators

THERMO SCIENTIFIC - These high-performance pharmacy refrigerators feature enhanced digital electronic technology that simplifies operation and delivers greater accuracy.

They feature microprocessor control, positive airflow systems, industrial-quality cabinet construction, extra-strength refrigeration compressors and full-extension stainless-steel rollout drawers. Designed for stable temperature control over a range of 1°C to 8°C.

Adjustable temperature control from 1°C to 8°C, factory preset at 4°C. Icon-based controls and displays include graphic references for universal operation. Setpoint security with key-operated, triple-position master switch controls power to all systems.

Audible/visual warnings for overtemperature, undertemperature and power failure, with visual status reports on critical functions. Remote alarm contacts. Graphic thermometer confirms proper operation: steady green for normal, flashing top bar for overtemperature, flashing bulb for undertemperature.

Advanced defrost sensor manages the defrost cycle, minimizing frost buildup. Enlarged digital display with resolution to within 0.1°C. Alarm silence, ringback and automatic reset functions. Push-button alarm test verifies sensor continuity.

Battery backup assures control panel function during power failure. Heavy-duty, industrial-grade, hermetically sealed compressors. Automatic defrost maintains optimum cooling capacity. Automatic condensate removal; no drain lines required.

Adjustable full-extension stainless steel drawers. Full-view glass door(s): double-pane construction eliminates condensation. Spring-loaded, lockable door closures enable 90° stay-open.



High-density, CFC-free urethane foam insulation protects cabinet from ambient temperature fluctuations. Positive, forced-air circulation maintains temperature uniformity at all shelf levels. Directional airflow assures quick recovery after door openings.

Interior cabinet lights with door-activated switch, plus independent switch on control panel. Doors self-close against closed-cell peripheral gasket. Smooth, scratch-resistant painted interior and exterior surfaces.

| Cat. No. | Mfr. No. | Description  | Qty. |
|----------|----------|--------------|------|
| RPR1204A | RPR1204A | 11.5 cu. ft. | 1/ea |
| RPR2304A | RPR2304A | 23.3 cu. ft. | 1/ea |
| RPR3004A | RPR3004A | 29.2 cu. ft. | 1/ea |
| RPR5004A | RPR5004A | 51.1 cu. ft. | 1/ea |

## Refrigerators: Pharmacy

### Premier Laboratory and Pharmacy Refrigerators

NOR-LAKE SCIENTIFIC - Heavy-duty design with one or two doors, in either solid or glass. Automatic defrost and digital LED microprocessor control with audible/visual high/low alarms with remote alarm contacts. White exterior front, sides and back. Exterior top and bottom are galvanized steel. White interior with three epoxy-coated shelves per door, which can be adjusted in 1 in. increments.

Refrigerator cabinet is formed-in-place with high-density polyurethane foam insulation. Doors have heavy-duty pivot hinges and pull handles with centered key locks and self-adjusting magnetic gaskets. Top-mounted refrigeration, air-cooled condensing unit, automatic condensate evaporation and door-opening heaters (glass door models). Four casters (two locking) on one- and two-door models. Available with optional chart recorder, up to eight stainless steel drawers, up to six wire basket drawers, internal electrical outlet, lead access ports, stainless steel interior and exterior and extra shelves. UL/CUL listed. Warranties: 18-month parts and labor, 5-year compressor (US and Canada).

#### Specifications:

Temperature range ..... 2°C to 10°C factory preset at 4°C  
Power requirement ..... 115V, 60 Hz

#### PR241WWG0 and PR241WWW0

Shelf area ..... 12.8 sq. ft.  
Interior dimensions (H x W x D) ..... 59 x 23½ x 30 in.  
Exterior dimensions (H x W x D) ..... 79¾ x 27½ x 35½ in.

#### PR331WWG0 and PR331WWW0

Shelf area ..... 15.8 sq. ft.  
Interior dimensions (H x W x D) ..... 67 x 27¾ x 31 in.  
Exterior dimensions (H x W x D) ..... 87½ x 31¾ x 36½ in.

#### PR522WWG0 and PR522WWW0

Shelf area ..... 28.6 sq. ft.  
Interior dimensions (H x W x D) ..... 59 x 51 x 30 in.  
Exterior dimensions (H x W x D) ..... 79¾ x 55 x 35½ in.



### Pharmaceutical Refrigerators

PANASONIC - Panasonic's +4°C MPR

Series offers a complete and integrated solution for the increased requirements of exacting storage temperatures for pharmaceuticals, medicines, vaccines and other temperature-sensitive biologicals. The slim front-to-back design and optional sliding shelves allows for an ergonomic easy-reach retrieval of your product.

To help ensure quality, safety and effectiveness of vital medical supplies, this pharmaceutical refrigerator features a precisely regulated cooling system that maintains a delicate temperature balance under a wide range of conditions. It has a highly efficient hermetic compressor that provides powerful, immediate cooling, which is effective at maintaining constant inside temperature. A thermistor sensor monitors the temperature inside the chamber and the microprocessor and electronic temperature control helps ensure that the set temperature is maintained. An easy-to-read digital temperature display provides at-a-glance confirmation of the current operating temperature. If the inside temperature suddenly descends below 0°C or rises above 15°C, the buzzer sounds an alarm and the digital temperature display flashes.



MPR-514R model shown

#### Specifications:

Power requirement ..... 115V, 60Hz, 1 phase, NEMA 5-15

#### MPR-311DH

Temperature control ..... 2°C to 14°C  
Interior dimensions (W x D x H) ..... 28.3 x 13.8 x 56.5 in.  
Exterior dimensions (W x D x H) ..... 31.4 x 17.7 x 70.8 in.

#### MPR-514, MPR-514R

5 polyester-coated shelves/racks ..... Shelves (load 50kg/shelf)  
Racks (load 20kg/shelf)  
Interior dimensions (W x D x H) ..... 31.5 x 18.3 x 51.2 in.  
External dimensions (W x D x H) ..... 35.4 x 23.6 x 70.5 in.

#### MPR-1014, MPR-1014R

10 polyester-coated shelves/racks ..... Shelves (load 50kg/shelf)  
Racks (load 20kg/shelf)  
Interior dimensions (W x D x H) ..... 66.9 x 18.3 x 51.2 in.  
External dimensions (W x D x H) ..... 70.9 x 23.6 x 70.5 in.

| Cat. No.           | Mfr. No.     | Description          | Qty. |
|--------------------|--------------|----------------------|------|
| <b>Glass doors</b> |              |                      |      |
| PR241WWG0          | NSPR241WWG/0 | 24 cu. ft. - 1 door  | 1/ea |
| PR331WWG0          | NSPR331WWG/0 | 33 cu. ft. - 1 door  | 1/ea |
| PR522WWG0          | NSPR522WWG/0 | 52 cu. ft. - 2 doors | 1/ea |
| <b>Solid doors</b> |              |                      |      |
| PR241WWW0          | NSPR241WWW/0 | 24 cu. ft. - 1 door  | 1/ea |
| PR331WWW0          | NSPR331WWW/0 | 33 cu. ft. - 1 door  | 1/ea |
| PR522WWW0          | NSPR522WWW/0 | 52 cu. ft. - 2 doors | 1/ea |

| Cat. No.  | Mfr. No.     | Description                     | Qty. |
|-----------|--------------|---------------------------------|------|
| MPR-311DH | MPR-311DH-PA | 12 cu. ft.                      | 1/ea |
| MPR-514   | MPR-514-PA   | 17.3 cu. ft. - 5 shelves        | 1/ea |
| MPR-514R  | MPR-514R-PA  | 17.2 cu. ft. - 5 sliding racks  | 1/ea |
| MPR-1014  | MPR-1014-PA  | 36.6 cu. ft. - 10 shelves       | 1/ea |
| MPR-1014R | MPR-1014R-PA | 36.5 cu. ft. - 10 sliding racks | 1/ea |

# Cold Storage

## Refrigerators: Pharmacy

### Pharmaceutical Refrigerators with Freezers

PANASONIC - With the growing emphasis on proper storage of laboratory and pharmacy materials, Panasonic MPR Series pharmacy refrigerators with freezers combine high performance refrigeration, control and alarm/monitoring systems with energy efficient, cost-effective cabinet design. One unit with dual temperature zone needs only minimal installation space. The two- and four-door designs reduce air loss during door openings. The triple or double-pane windows with heat reflection film help reduce condensation. Calibration adjustment is available through the control panel to provide easier validation services. The MPR Series combo units offer quiet operation and have two separate specially designed compressors.



MPR-414F model shown

Additional features include:

- Validated storage of reagents, pharmaceuticals and biological samples
- Ideal biologic storage environment for precise control and superior temperature uniformity
- Microprocessor controller and interior forced air circulation
- Safe and secured storage behind a keyed locking door
- Integrated alarm functions, remote alarm contacts and monitoring

#### Specifications:

##### Temperature range

Refrigerator ..... 2°C to 14°C ambient temp. 30°C  
Freezer ..... -20°C to -30°C ambient temp. 30°C

##### Dimensions (W x D x H)

MPR-215F exterior ..... 21.2 x 21.9 x 70.4 in.  
MPR-414F exterior ..... 31.5 x 23.6 x 71 in.  
MPR-715F exterior ..... 35.4 x 28.1 x 75.2 in.

| Cat. No.        | Mfr. No.    | Description                           | Qty. |
|-----------------|-------------|---------------------------------------|------|
| <b>MPR-215F</b> | MPR-215F-PA | 6.2/1.4 cu. ft. ref/freezer - 2-door  | 1/ea |
| <b>MPR-414F</b> | MPR-414F-PA | 12/2.9 cu. ft. ref/freezer - 4-door   | 1/ea |
| <b>MPR-715F</b> | MPR-715F    | 14.7/6.2 cu. ft. ref/freezer - 4-door | 1/ea |

## Refrigerators: General-Purpose

### Thermo Scientific 5.6 cu. ft. Undercounter Refrigerators

THERMO SCIENTIFIC - This general-purpose refrigerator features manual defrost, adjustable hydraulic thermostat control and CFC-insulation and coolant.



| Cat. No.    | Mfr. No. | Description                              | Qty. |
|-------------|----------|--|------|
| <b>3751</b> | 3751-DB  | 5.6 cu. ft., 1° to 12°C temp range, 115V | 1/ea |

### Thermo Scientific Jewett® Undercounter Refrigerators

THERMO SCIENTIFIC - These Jewett® undercounter refrigerators are fully featured for storage of critical materials that demand constant temperature and security.



- Uniform cabinet temperatures of 2°C to 4°C with rapid recovery after door openings
- Advanced blower-coil, forced-air cooling with automatic off cycle defrost
- Recirculating air fan with automatic shutoff when door is open
- Automatic condensate evaporator (no plumbing required)
- Hermetically-sealed refrigeration condensing unit
- Minimum 2 in. (5.1cm) CFC-free polyurethane insulation, vapor-sealed
- Galvannealed 20-gauge steel exterior cabinet with mar-resistant beige enamel finish
- Illuminated interior with adjusted epoxy-coated wire shelves
- High-visibility digital temperature display
- Positive door latches with key lock for added security
- Dished interior bottoms to contain spills

| Cat. No.       | Mfr. No. | Description  | Qty. |
|----------------|----------|--|------|
| <b>UC5B-1B</b> | UC5B-1B  | 5.4 cu. ft. refrigerator   | 1/ea |
| <b>CT1-1B</b>  | CT1-1B   | 5.4 cu. ft. blood bank refrigerator - standalone HemaPro 101 monitor | 1/ea |



### Thermo Scientific Value Refrigerators

THERMO SCIENTIFIC - These units are intended for basic laboratory use only. Storage of high-value, life science materials or clinical biologicals may require alarm, monitoring, back-up and temperature performance features. The need to add these features should be determined by your industrial hygienist or safety officer. These units are not suitable for corrosive environments.

- Adjustable shelves or baskets included
- CFC-free insulation and coolant
- Manual defrost
- NRTL tested
- Environmentally friendly, non-CFC refrigerants
- Adjustable temperature control, manual defrost

| Cat. No. | Mfr. No. | Description                        | Qty. |
|----------|----------|------------------------------------|------|
| R54802   | 3754     | 6 cu. ft., 1°C to 12°C temp range  | 1/ea |
| 3766AA   | 3766A    | 20 cu. ft., 2°C to 10°C temp range | 1/ea |



### 17CAR 16.7 cu. ft. General-Purpose Refrigerator

AGA MARVEL SCIENTIFIC - Designed for general laboratory storage, this full-sized freestanding refrigerator can operate in ambient temperatures as low as 10°F. It features a heat-assisted automatic defrost cycle and is therefore not recommended for critical temperature storage applications such as vaccines. Features include an adjustable thermostat and automatic defrost. The refrigerator is supplied with two adjustable wire shelves, two fixed wire shelves, five door racks, a door handle, an interior light and leveling legs. It requires 3 in. of clearance from the top, sides and back for proper operation. The refrigerator is white and has a right-hand hinged door. Commercial CSA listed. Uses non-CFC refrigerant.

#### Specifications:

Temperature range.....37°F to 46°F  
Capacity.....16.7 cu. ft.

Power requirements .....115V, 60 Hz, 5.0A

#### Dimensions (H x W x D)

Interior .....51 x 27 x 21¾ in.  
Exterior .....64½ x 32 x 26½ in.

| Cat. No. | Mfr. No. | Description                        | Qty. |
|----------|----------|------------------------------------|------|
| 17CAR001 | 17CAR001 | 17CAR general-purpose refrigerator | 1/ct |

## If you don't see what you are looking for ... contact us.

If you don't see the product you are looking for, just pick up the phone and ask your sales or customer service representative to assist you. Visit our website at [cardinalhealth.com](http://cardinalhealth.com) for more information.

**Customer Service: 800.964.5227**

# Cold Storage

## Refrigerators: General-Purpose



### 3CARM General-Purpose Refrigerator

AGA MARVEL SCIENTIFIC - These refrigerators feature the exclusive MicroSentry™ Scientific refrigeration controller with digital temperature display to provide superior temperature accuracy, control and monitoring of temperature-critical contents. The MicroSentry™ Scientific controller permits the user to select the "setpoint" temperature, high- and low-temperature alarm values and the alarm delay period to perfectly match storage requirements. Other features include control keypad lockout mode, high- and low-temperature history record, door ajar alarm, remote alarm interface and built-in diagnostics. Includes three adjustable wire shelves, positive-close door hinge system, jacketed commercial power cord with hospital-grade plug and forced air condenser ventilation that eliminates the need for cooling air clearance in built-in applications. Commercial UL- and CUL-listed. Uses non-CFC refrigerant.

#### Specifications:

Temperature range ..... 1°C to 7°C  
Capacity ..... 3.0 cu. ft.  
Power requirements ..... 115V, 60 Hz, 3.3A

#### Dimensions (H x W x D)

Interior ..... 22½ x 12 x 18¼ in.  
Exterior ..... 34 x 14¾ x 23¾ in.

| Cat. No.        | Mfr. No. | Description                   | Qty. |
|-----------------|----------|-------------------------------|------|
| <b>3CARM001</b> | 3CARM100 | 3.0 cu. ft.                   | 1/ea |
| <b>3CARM104</b> | 3CARM104 | With door lock and probe port | 1/ea |



### 6CARM General-Purpose Refrigerators

AGA MARVEL SCIENTIFIC - These refrigerators feature the exclusive MicroSentry™ Scientific refrigeration controller with digital temperature display to provide superior temperature accuracy, control and monitoring of temperature-critical contents. The MicroSentry™ Scientific controller permits the user to select the "setpoint" temperature, high- and low-temperature alarm values and the alarm delay period to perfectly match storage requirements. Other features include control keypad lockout mode, high- and low-temperature history record, door ajar alarm, remote alarm interface, and built-in diagnostics. The 6CARM has two adjustable wire shelves, positive-close door hinge system, jacketed commercial power cord with hospital-grade plug and forced air condenser ventilation that helps eliminate the need for cooling air clearance in built-in applications. Commercial UL- and CUL-listed. Uses non-CFC refrigerant.

#### Specifications:

Temperature range ..... 1°C to 7°C  
Capacity ..... 6.1 cu. ft.  
Power requirements ..... 115V, 60 Hz, 3.3A

#### Dimensions (H x W x D)

Interior ..... 26½ x 21 x 20¾ in.  
Exterior ..... 34 x 23¾ x 24 in.

| Cat. No.        | Mfr. No. | Description                                      | Qty. |
|-----------------|----------|--|------|
| <b>6CARM001</b> | 6CARM100 | 6.1 cu. ft.                                      | 1/ea |
| <b>6CARM102</b> | 6CARM102 | With door lock and probe port, right-hand hinge  | 1/ea |
| <b>6CARM103</b> | 6CARM103 | With door lock and probe port, left-hand hinge   | 1/ea |
| <b>6CARM176</b> | 6CARM106 | With glass door and probe port, right-hand hinge | 1/ea |

## Refrigerators: General-Purpose



### 6CADM General-Purpose Refrigerators, ADA Height-Compliant

AGA MARVEL SCIENTIFIC - These refrigerators feature the exclusive MicroSentry™ Scientific refrigeration controller with digital temperature display to provide superior temperature accuracy, control and monitoring of temperature-critical contents. The MicroSentry™ Scientific controller permits the user to select the "setpoint" temperature, high- and low-temperature alarm values and the alarm delay period to correctly match storage requirements. Other features include control keypad lockout mode, high- and low-temperature history record, door ajar alarm, remote alarm interface and built-in diagnostics. The 6CADM has two adjustable wire shelves, positive-close door hinge system, jacketed commercial power cord with hospital-grade plug and forced air condenser ventilation that helps eliminate the need for cooling air clearance in built-in applications. Commercial UL- and CUL-listed. Uses non-CFC refrigerant.

#### Specifications:

Temperature range ..... 1°C to 7°C  
 Capacity ..... 5.4 cu. ft.  
 Power requirements ..... 115V, 60 Hz, 3.3A

#### Dimensions (H x W x D)

Interior ..... 19½ x 20¼ x 19½ in.  
 Exterior ..... 31½ x 23¾ x 24¾ in.

| Cat. No.        | Mfr. No. | Description                                     | Qty. |
|-----------------|----------|---|------|
| <b>6CADM100</b> | 6CADM100 | 5.4 cu. ft. - ADA compliant                     | 1/ea |
| <b>6CADM102</b> | 6CADM102 | With door lock and probe port, right-hand hinge | 1/ea |
| <b>6CADM103</b> | 6CADM103 | With door lock and probe port, left-hand hinge  | 1/ea |



### 8CARM General-Purpose Refrigerators

AGA MARVEL SCIENTIFIC - These refrigerators feature the exclusive MicroSentry™ Scientific refrigeration controller with digital temperature display to provide superior temperature accuracy, control and monitoring of temperature-critical contents. The MicroSentry™ Scientific controller permits the user to select the "setpoint" temperature, high- and low-temperature alarm values and the alarm delay period to correctly match storage requirements. Other features include control keypad lockout mode, high- and low-temperature history record, door ajar alarm, remote alarm interface and built-in diagnostics. The 8CARM has two adjustable wire shelves, positive-close door hinge system, jacketed commercial power cord with hospital-grade plug and forced air condenser ventilation that helps eliminate the need for cooling air clearance in built-in applications. Commercial UL- and CUL-listed. Uses non-CFC refrigerant.

#### Specifications:

Temperature range ..... 1°C to 7°C  
 Capacity ..... 8.0 cu. ft.  
 Power requirements ..... 115V, 60 Hz, 3.3A

#### Dimensions (H x W x D)

Interior ..... 26½ x 28 x 20¾ in.  
 Exterior ..... 34 x 29¾ x 24 in.

| Cat. No.        | Mfr. No. | Description                                     | Qty. |
|-----------------|----------|---|------|
| <b>8CARM100</b> | 8CARM100 | 8.0 cu. ft., right-hand hinge                   | 1/ea |
| <b>8CARM101</b> | 8CARM101 | With left-hand hinge                            | 1/ea |
| <b>8CARM102</b> | 8CARM102 | With door lock and probe port, right-hand hinge | 1/ea |
| <b>8CARM103</b> | 8CARM103 | With door lock and probe port, left-hand hinge  | 1/ea |

# Cold Storage

## Refrigerators: General-Purpose

### General-Purpose Laboratory Refrigerator

NOR-LAKE SCIENTIFIC - This general-purpose refrigerator provides convenience and durability. The exterior front, sides, back and door are white baked-on enamel. The exterior top and bottom are galvanized steel. Unit offers top-mounted refrigeration, cold wall evaporator, air-cooled condensing unit and manual defrost. They have an internal chamber thermometer. The cabinet and doors are foamed-in-place with high-density polyurethane foam insulation. The interior liner and interior door panel are smooth aluminum and there are three epoxy-coated adjustable wire shelves.



Other features include self-closing solid door with magnetic door gasket, heavy-duty spring-loaded hinges, door-opening heaters, full-length stainless steel pull handles, key lock and four casters (two locking). UL- and CUL-listed. Available with stainless steel drawers, stainless steel interior and exterior, digital thermometer with alarm, chart recorder and extra shelves.

#### Specifications:

|                                      |                     |
|--------------------------------------|---------------------|
| Shelf area.....                      | 12.8 sq. ft.        |
| Temperature range.....               | 2°C to 8°C          |
| Power requirements .....             | 115V, 60 Hz         |
| Interior dimensions (H x W x D)..... | 76¾ x 23½ x 30 in.  |
| Exterior dimensions (H x W x D)..... | 80¾ x 27½ x 34¾ in. |

| Cat. No.   | Mfr. No.      | Description             | Qty. |
|------------|---------------|-------------------------|------|
| LR241WMW0M | NSLR241WMW/0M | 24 cu. ft. refrigerator | 1/ea |



### General-Purpose Laboratory Refrigerator Upright Auto Defrost

NOR-LAKE SCIENTIFIC - This auto forced-air defrost model's standard shelving includes two adjustable wire shelves, five full-width fixed door bins, two fixed wire shelves and a bottom shelf. The unit offers an interior light, two adjustable leg levelers and automatic door closers.

Features a white interior, exterior, door and handle. Operating temperature +4°C with adjustable temperature control. The cabinet is foamed-in-place with CFC-free high-density polyurethane foam insulation. Units come with a 12-month parts warranty.

#### Specifications:

|                                       |                    |
|---------------------------------------|--------------------|
| Interior dimensions (H x W x D) ..... | 52 x 27½ x 21½ in. |
| Exterior dimensions (H x W x D).....  | 64½ x 32 x 28½ in. |
| Power requirements .....              | 115V/1PH, 60Hz     |

| Cat. No.  | Mfr. No.   | Description               | Qty. |
|-----------|------------|---------------------------|------|
| LR161WWW0 | LR161WWW/0 | 16.7 cu. ft. refrigerator | 1/ea |



### Undercounter and Freestanding Refrigerator

NOR-LAKE SCIENTIFIC - Ideal for pharmacy and general laboratory storage, this compact refrigerator features an industrial-quality cabinet and a heavy-duty refrigeration system to maintain your valuable materials. It can be built-in on three sides, as the airflow is through the base, top and rear of the unit. Standard shelving includes four interior shelves (three adjustable and removable full-size glass shelves and one half-size glass shelf) and three adjustable door shelves.

The unit offers a base-mounted refrigeration system, air-cooled condensing unit, automatic defrost, two front-leveling legs, interior light and magnetic gasket. It has a reversible solid door with pull door handle and door lock. Operating temperature is 4°C and there are seven control settings. The cabinet and door are foamed-in-place with high-density polyurethane foam insulation. Exterior and interior are painted white. Available with optional digital thermometer with alarm, stacking kit and freestanding chart recorder. UL- and CUL-listed. Units come with a 12-month parts warranty.

#### Specifications:

|                                       |                     |
|---------------------------------------|---------------------|
| Shelf area.....                       | 5.2 sq. ft.         |
| Temperature range.....                | 2°C to 8°C          |
| Interior dimensions (H x W x D) ..... | 27½ x 20¾ x 17¾ in. |
| Exterior dimensions (H x W x D).....  | 33½ x 23 x 23½ in.  |

| Cat. No.  | Mfr. No.   | Description              | Qty. |
|-----------|------------|--------------------------|------|
| LR061WWW0 | LR061WWW/0 | 5.5 cu. ft. refrigerator | 1/ea |

## Refrigerators and Freezers: General-Purpose

### Select Series

#### Laboratory Refrigerators and Freezers

**CARDINAL HEALTH** - Cardinal Health Select Series Laboratory Refrigerators, Freezers and Combination Units provide an economical solution for safe sample storage. Our range of models are particularly suited for routine laboratory applications with sizes from small benchtop to full-height freestanding.

- Factory-tested prior to shipment
- NRTL-listed
- Non-CFC refrigerants
- Adjustable temperature control
- Easy-to-clean, durable finish
- Manual and auto defrost combination units
- Manual defrost refrigerators and freezers

Certifications: CSA or UL



#### Refrigerators (temperature range 1°C to 12°C)

| Cat. No.   | Cu. Ft. | Defrost | Voltage   | Shelves (Interior) | Key Lock | Int. Dimensions H x D x W in. | Ext. Dimensions H x D x W in. | Ship Weight lbs. |
|------------|---------|---------|-----------|--------------------|----------|-------------------------------|-------------------------------|------------------|
| CH06LR16WW | 5.6     | Manual  | 120V/60Hz | 4 adjustable       | Yes      | 16 x 20 x 27.5*               | 33.5 x 25.13 x 23.65          | 102              |
| CH20LR16WW | 20.3    | Manual  | 115V/60Hz | 5 fixed            | Yes      | 20 x 27 x 57**                | 70 x 32 x 30.75               | 240              |

\* 10 in. (for bottom 8 in.), 16 in. (for top 19.5 in.)      \*\* 17 in. (for bottom 20 in.), 20 in. (for top 40 in.)

#### Freezers (temperature range -12°C to -20°C)

| Cat. No.   | Cu. Ft. | Defrost | Voltage   | Shelves (Interior) | Key Lock | Int. Dimensions H x D x W in. | Ext. Dimensions H x D x W in. | Ship Weight lbs. |
|------------|---------|---------|-----------|--------------------|----------|-------------------------------|-------------------------------|------------------|
| CH05LF16WW | 5       | Manual  | 115V/60Hz | 2 fixed, 3 door    | No       | 15 x 18 x 28.5                | 33.5 x 23.5 x 21              | 84               |
| CH20LF16WW | 20.6    | Manual  | 115V/60Hz | 4 fixed            | Yes      | 20 x 27 x 57                  | 71 x 31 x 32                  | 200              |

#### Combination Refrigerator/Freezers (temperature range 1°C to 12°C ref., -12°C to -20°C frz.)

| Cat. No.   | Cu. Ft. | Defrost   | Voltage   | Shelves (Interior) | Drawers | Int. Dimensions H x D x W in.                          | Ext. Dimensions H x D x W in. | Ship Weight lbs. |
|------------|---------|-----------|-----------|--------------------|---------|--|-------------------------------|------------------|
| CH10LC16WW | 10      | Manual    | 120V/60Hz | Ref: 3/4<br>Frz: 1 | -       | 13.5 x 19.5 x 38.5 (ref.)<br>15 x 17.5 x 11.5 (frz.)   | 60 x 23.5 x 26.5              | 150              |
| CH18LC16WW | 18.2    | Automatic | 120V/60Hz | Ref: 2<br>Frz: 3   | 3       | 18.75 x 22.5 x 39.5 (ref)<br>14.5 x 23.75 x 13.5 (frz) | 66.1 x 32.4 x 29.6            | 205              |

# Cold Storage

## Refrigerators and Freezers: General-Purpose

### Thermo Scientific Jewett® Dual-Temperature Refrigerator/Freezer

THERMO SCIENTIFIC - These Jewett® refrigerator/freezers feature the convenience of two separate cooling compartments. The Jewett® dual-temperature refrigerator/freezer combinations are fully equipped for more demanding general-purpose storage requirements.

- Dual-temperature refrigerator/freezer control
- Upright models with operating temperatures of 2°C to 4°C (refrigerator) and -20°C (freezer)
- Rapid temperature recovery after door openings
- Advanced forced-air cooling and automatic/off-cycle defrost
- High-visibility digital temperature display
- Positive door latches with key lock for added security
- Options include alarm/monitoring system and temperature chart recorder

| Cat. No. | Mfr. No. | Description                                     | Qty. |
|----------|----------|---|------|
| PRF17-1B | PRF17-1B | 11 cu. ft. refrigerator/<br>4.7 cu. ft. freezer | 1/ea |

### Thermo Scientific Value Refrigerator/Freezer Combinations

THERMO SCIENTIFIC - An economical solution for safe, sample storage. These units are intended for basic laboratory use only. Storage of high-value, life science materials or clinical biologicals may require alarm, monitoring, back-up and temperature performance features. The need to add these features should be determined by your industrial hygienist or safety officer. These units are not suitable for corrosive environments.



NRTL-listed. Environmentally friendly, non-CFC refrigerants. Adjustable temperature control. Easy-to-clean, durable finish. Manual and auto defrost combination units.

#### Specifications:

Refrigerator range ..... 1°C to 12°C  
Freezer range ..... 12°C to -20°C

| Cat. No. | Mfr. No. | Description   | Qty. |
|----------|----------|---|------|
| R4038-2  | 3750     | 5.6 cu. ft. - manual defrost - 120V   | 1/ea |
| R4038-3A | 3764A    | 10 cu. ft. - manual defrost - 120V  | 1/ea |
| 3772A    | 3772     | 12 cu. ft. - auto defrost (refrigerator)<br>manual defrost (freezer) - 115V | 1/ea |
| RCRF192A | RCRF192A | 17.6 cu. ft. - automatic defrost - 115V                                     | 1/ea |
| R3800-01 | RCRF252A | 24.6 cu. ft. - automatic defrost - 120V                                     | 1/ea |

### 6CRF General-Purpose Combination Refrigerators/Freezers

AGA MARVEL SCIENTIFIC - These refrigerators/freezers feature forced air ventilation, which helps eliminate the need for clearance space in built-in applications. They include two wire shelves, three door shelves, adjustable microprocessor-based thermostat and manual defrost. Commercial UL- and CUL-listed. Uses non-CFC refrigerant.



#### Specifications:

Volume ..... 6.1 cu. ft.  
Power requirements ..... 115VAC, 60 Hz, 3.3A

#### Temperature range

Refrigerator ..... 1°C to 7°C  
Freezer ..... -18°C to -9°C

#### Dimensions (H x W x D)

Interior ..... 28 x 21 x 20 3/4 in.  
Exterior ..... 34 x 23 7/8 x 24 in.

| Cat. No. | Mfr. No. | Description                                     | Qty. |
|----------|----------|---|------|
| 6CRF7001 | 6CRF7100 | 6.1 cu. ft.                                     | 1/ea |
| 6CRF7004 | 6CRF7102 | With door lock and probe port, right-hand hinge | 1/ea |

### 8CRF General-Purpose Combination Refrigerator/Freezer

AGA MARVEL SCIENTIFIC - This combination refrigerator/freezer fits easily under lab benches and casework. Forced air ventilation eliminates the need for clearance space in built-in applications. Features two wire shelves, three door shelves, adjustable microprocessor-based thermostat and manual defrost. Commercial UL- and CUL-listed. Uses non-CFC refrigerant.



#### Specifications:

Volume ..... 8.0 cu. ft.  
Power requirements ..... 115VAC, 60 Hz, 3.3A

#### Temperature range

Refrigerator ..... 1°C to 7°C  
Freezer ..... -18°C to -9°C

#### Dimensions (H x W x D)

Interior ..... 28 1/2 x 28 x 20 1/4 in.  
Exterior ..... 34 x 29 7/8 x 24 in.

| Cat. No. | Mfr. No. | Description | Qty. |
|----------|----------|-------------|------|
| 8CRF7001 | 8CRF7100 | 8.0 cu. ft. | 1/ct |

## Refrigerators and Freezers: General-Purpose

### Combination Refrigerator/Freezer

NOR-LAKE SCIENTIFIC - Ideal for compact spaces, this unit is configured with a freezer compartment on the bottom and a refrigerator compartment on top. The exterior front, doors and sides are white baked-on enamel. The exterior top, back and bottom are galvanized steel. The interior is white enamel and there are two epoxy-coated adjustable wire shelves per chamber. The cabinet and doors are foamed-in-place with high-density polyurethane foam insulation.

The unit offers two digital LED display microprocessor controllers (one each for freezer and refrigerator), high/low visual alarm, remote alarm contacts, air-cooled condensing unit and automatic defrost. The doors feature heavy-duty pivot hinges, key locks, full-length pull handles, magnetic gaskets and doorframe heater wires. Air-cooled condensing unit and top-mounted refrigeration system. It is mounted on four casters (two locking). UL/CUL-listed. Available with optional extra shelves, access port, electrical outlet, chart recorder and stainless steel interior and exterior, lead access ports, stainless steel drawers and wire basket drawers. Warranties: 18-month parts and labor, 5-year compressor (US and Canada).

#### Specifications:

Shelf area ..... 12.8 sq. ft.

Temperature preset ..... -20°C freezer/+4°C refrigerator

Power requirements ..... 115V, 60 Hz

#### Dimensions (H x W x D)

Interior (per compartment) ..... 27½ x 23½ x 30 in.

Exterior ..... 81½ x 27½ x 34¾ in.

| Cat. No.  | Mfr. No.     | Description                  | Qty. |
|-----------|--------------|------------------------------|------|
| RF202WWW0 | NSRF202WWW/0 | 20 cu. ft. refriger./freezer | 1/ea |



### General-Purpose Laboratory Refrigerator/Freezer Upright Auto Defrost

NOR-LAKE SCIENTIFIC - This auto, forced air defrost model's standard shelving and storage for the refrigerator includes three adjustable sliding full-width shelves, three independent removable clear plastic drawer storage bins, three full-width fixed door bins and one-door storage bin with removable hinged clear plastic cover. Standard shelving and storage for the freezer two full-width door storage bins and one adjustable shelf.



The unit offers an interior light, two adjustable leg levelers and automatic door closers. Feature a white interior, exterior, door and handle. Operating temperature +4°C refrigerator, -10°C freezer with adjustable temperature control independent for refrigerator and freezer. The cabinet is foamed-in-place with CFC-free high-density polyurethane foam insulation. Units come with a 12-month parts warranty.

#### Specifications:

##### Refrigerator compartment (H x W x D)

Interior dimensions ..... 39½ x 26 x 26½ in.

Exterior dimensions ..... 68 x 30 x 34 in.

##### Freezer compartment (H x W x D)

Interior dimensions ..... 17¼ x 24 x 22 in.

| Cat. No.   | Mfr. No.    | Description  | Qty. |
|------------|-------------|--------------|------|
| LRF201WWW0 | LRF201WWW/0 | 20.5 cu. ft. | 1/ea |

### Undercounter Refrigerator/Freezer

NOR-LAKE SCIENTIFIC - Standard product features:

- Independent internal freezer compartment with door
- Exterior front, door, top and sides are painted white
- Interior liner and interior door panel are white durable vacuum formed poly with seamless rounded corners for easy cleaning
- Cabinet and door are foamed-in-place with CFC-free high-density polyurethane foam insulation
- Stackable design with optional stacking kit
- One solid outer door, pull door handle
- Door lock (two keys)
- Two adjustable and removable glass shelves
- One removable clear plastic drawer bins
- Two front leveling legs
- 5-15P NEMA plug and cord set
- Base mount refrigeration system
- May be built-in on three sides, air intake and exhaust is through the base, top and rear of the unit
- Compatible with laboratory casework dimensions
- Air-cooled condensing unit
- Manual defrost freezer, auto defrost refrigerator
- Interior light
- Drain pan evaporation



- Reversible door, magnetic door gasket
- Recessed kickplate

Warranty: 12 months parts only. UL- and CUL-listed.

#### Specifications:

Temperature range ..... Adjustable to -20°C freezer, +4°C refrigerator

Power requirements ..... 115V, 1PH, 60Hz

#### Dimensions (H x W x D)

Interior ..... 24 x 17.5 x 16.5 in.

Exterior ..... 33.5 x 23.625 x 24.875 in.

| Cat. No.  | Mfr. No.     | Description                   | Qty. |
|-----------|--------------|-------------------------------|------|
| LRF051WWW | LRF051WWW/0M | 4.1 cu. ft. refriger./freezer | 1/ea |

# Cold Storage

## Refrigerators and Freezers: Spark-Free

### Select Series

#### Spark-Free Laboratory Refrigerators and Freezers

**CARDINAL HEALTH** - Cardinal Health Spark-Free Refrigerators, Freezers and Combination Units are designed to be used in areas where ignitable materials are normally present.

A range of models, particularly suited for safe storage in hazardous environments, are available with sizes from undercounter to full height freestanding.

- Spark-free interior and exteriors reduce the risk of explosion
- All models are manual defrost
- Tough, white exterior
- CFC- and HCFC-free refrigeration system and insulation
- Designed for use in Class 1, Division 1, Group C and D environments
- Plug-free cords (units must be hardwired to wall)

Certifications: CSA or UL



#### Refrigerators (temperature range 1°C to 12°C)

| Cat. No.   | Cu. Ft. | Defrost | Voltage   | Shelves (Interior) | Key Lock | Int. Dimensions H x D x W in. | Ext. Dimensions H x D x W in. | Ship Weight lbs. |
|------------|---------|---------|-----------|--------------------|----------|-------------------------------|-------------------------------|------------------|
| CH06ER16WW | 5.6     | Manual  | 120V/60Hz | 4 adjustable       | Yes      | 16 x 20 x 27.5*               | 33.5 x 29.5 x 23.5            | 110              |
| CH20ER16WW | 21      | Manual  | 120V/60Hz | 4 fixed            | Yes      | 16.5 x 27 x 55                | 74.5 x 31.75 x 32             | 230              |

\*10 in. (for bottom 8 in.); 16 in. (for top 19.5 in.)

#### Freezers (temperature range -12°C to -20°C)

| Cat. No.   | Cu. Ft. | Defrost | Voltage   | Shelves (Interior) | Key Lock | Int. Dimensions H x D x W in. | Ext. Dimensions H x D x W in. | Ship Weight lbs. |
|------------|---------|---------|-----------|--------------------|----------|-------------------------------|-------------------------------|------------------|
| CH05EF16WW | 5       | Manual  | 115V/60Hz | 2 fixed, 3 door    | No       | 15 x 18 x 28.5                | 33.5 x 29.75 x 21             | 84               |
| CH20EF16WW | 20.6    | Manual  | 115V/60Hz | 4 fixed            | Yes      | 20 x 27 x 57                  | 73 x 36 x 32                  | 200              |

#### Combination refrigerator/freezer (temperature range 1°C to 12°C Ref., -12°C to -20°C Frz.)

| Cat. No.   | Cu. Ft. | Defrost | Voltage   | Shelves (Interior)                            | Key Lock | Int. Dimensions H x D x W in.                        | Ext. Dimensions H x D x W in. | Ship Weight lbs. |
|------------|---------|---------|-----------|---|----------|--|-------------------------------|------------------|
| CH10EC16WW | 10      | Manual  | 120V/60Hz | Ref: 4 door,<br>3 adjustable;<br>Frz: 1 fixed | No       | 13.5 x 19.5 x 38.5 (ref.)<br>15 x 17.5 x 11.5 (frz.) | 60 x 31.5 x 23.5              | 150              |

## Refrigerators and Freezers: Explosion-Proof

### Thermo Scientific Explosion-Proof Refrigerator

**THERMO SCIENTIFIC** - This explosion-proof refrigerator is engineered to prevent triggering an explosion inside or outside the unit.

Thermostat and compressor components are isolated within a vapor-proof enclosure. Electrical connections are hardwired to help prevent sparking and accidental disconnection.

Hydraulic thermostat and manual defrost. Magnetic vinyl gaskets for positive door seal. CFC-free insulation and refrigerant.

Suitable for use in Class I, Division I Group C and D hazardous environments.

| Cat. No. | Mfr. No. | Description                    | Qty. |
|----------|----------|--------------------------------|------|
| R403520  | 3566A    | 21 cu. ft. refrigerator - 120V | 1/ea |

## Refrigerators and Freezers: Flammable Material

### Select Series

#### Flammable Material Laboratory Refrigerators and Freezers

**CARDINAL HEALTH** - Cardinal Health Flammable Storage Refrigerators, Freezers and Combination Units are designed to be used for storage of volatiles where a spark-free internal cabinet environment is required.

A range of models particularly suited for storage of flammable materials with sizes from small undercounter to full height freestanding.

- Spark-free interiors to reduce risk of internal explosion
- All units are manual defrost
- Tough, white exterior
- CFC- and HCFC-free refrigeration system and insulation
- Designed to meet NFPA 45 and 99 along with OSHA article 1910.307

Certifications: CSA or UL



#### Refrigerators (temperature range 1°C to 12°C)

| Cat. No.   | Cu. Ft. | Defrost | Voltage   | Shelves (Interior) | Key Lock | Int. Dimensions H x D x W in. | Ext. Dimensions H x D x W in. | Ship Weight lbs. |
|------------|---------|---------|-----------|--------------------|----------|-------------------------------|-------------------------------|------------------|
| CH06FR16WW | 5.6     | Manual  | 120V/60Hz | 4 adjustable       | Yes      | 16 x 20 x 27.5*               | 33.5 x 28.75 x 23.5           | 110              |
| CH20FR16WW | 21      | Manual  | 115V/60Hz | 4 fixed            | Yes      | 16.5 x 27 x 55                | 74.5 x 31.75 x 32             | 230              |

\*10 in. (for bottom 8 in.); 16 in. (for top 19.5 in.)

#### Freezers (temperature range -12°C to -20°C)

| Cat. No.   | Cu. Ft. | Defrost | Voltage   | Shelves (Interior) | Key Lock | Int. Dimensions H x D x W in. | Ext. Dimensions H x D x W in. | Ship Weight lbs. |
|------------|---------|---------|-----------|--------------------|----------|-------------------------------|-------------------------------|------------------|
| CH05FF16WW | 5       | Manual  | 115V/60Hz | 2 fixed, 3 door    | No       | 15 x 18 x 28.5                | 33.5 x 31.25 x 21             | 84               |
| CH20FF16WW | 20.6    | Manual  | 115V/60Hz | 4 fixed            | Yes      | 20 x 27 x 57                  | 73 x 36 x 32                  | 200              |

#### Combination refrigerator/freezer (temperature range 1°C to 12°C Ref., -12°C to -20°C Frz.)

| Cat. No.   | Cu. Ft. | Defrost | Voltage   | Shelves (Interior)                                | Key Lock | Int. Dimensions H x D x W in.                        | Ext. Dimensions H x D x W in. | Ship Weight lbs. |
|------------|---------|---------|-----------|---|----------|--|-------------------------------|------------------|
| CH10FC16WW | 10      | Manual  | 120V/60Hz | Ref: 4 door,<br>3 adjustable<br>Frz: 1 adjustable | No       | 13.5 x 19.5 x 38.5 (ref.)<br>15 x 17.5 x 11.5 (frz.) | 60 x 30 x 23.5                | 150              |

# Cold Storage

## Refrigerators and Freezers: Flammable Material

### Thermo Scientific Flammable Material Refrigerator

THERMO SCIENTIFIC - This flammable storage refrigerator is designed for storage of volatiles where a spark-free internal cabinet environment is required. This unit has manual defrost with CFC- and HCFC-free refrigerants and insulation.



| Cat. No.  | Mfr. No. | Description                    | Qty. |
|-----------|----------|--------------------------------|------|
| 3566-10AA | 3566-10A | 21 cu. ft. refrigerator - 120V | 1/ea |

### Thermo Scientific Flammable Materials Storage Refrigerator/Freezer

THERMO SCIENTIFIC - Choose this refrigerator/freezer to help protect your lab from explosions caused by fume seepage from containers within the working chamber. The refrigerator/freezer's compressor motor and relay are sealed within explosion-resistant enclosures, helping to eliminate the possibility of an electrical spark or arc from any component. Exterior construction is heavy-gauge, rigid braced steel with white baked-on enamel finish; interior is ABS plastic. Magnetic positive-seal vinyl door gaskets provide a tight-sealed door. Shelves rest on brackets to permit easy removal. With outlet box, wire and cord. Meets OSHA and NFPA safety requirements.



- Store volatiles more safely
- Thermostat located on exterior of cabinet to eliminate interaction with stored materials
- Magnetic vinyl gaskets for positive door seal
- CFC-free insulation and coolant
- Three adjustable shelves and four door shelves in refrigerator section
- Hydraulic thermostat; adjustable natural airflow vent
- Manual defrost

#### Specifications:

Capacity ..... 10.1 cu. ft.

#### Temperature range

Refrigerator ..... -1°C to 12°C

Freezer ..... -20°C to 12°C

| Cat. No.  | Mfr. No. | Description                       | Qty. |
|-----------|----------|-----------------------------------|------|
| R4037-14A | 3551-10  | 10.1 cu. ft. refrigerator/freezer | 1/ea |



### Flammable Storage Refrigerator

NOR-LAKE SCIENTIFIC - Designed for storage of flammable materials in approved containers for Class I, Division 2 Storage of Flammable Liquids per NFPA Standards, 70, 99, 45, 497A, UL471. This heavy-duty refrigerator has an internal chamber thermometer that is preset at 4°C. The exterior front, sides, back and door are white baked-on enamel. The exterior top and bottom are galvanized steel. The interior liner and door panel are smooth aluminum and there are three epoxy-coated adjustable wire shelves. The cabinet and doors are foamed-in-place with high-density polyurethane foam insulation.

Unit offers complete top-mounted refrigeration system, cold wall evaporator, air-cooled condensing unit and manual defrost. It has a self-closing solid door with magnetic door gasket, heavy-duty, spring-loaded hinges, full-length stainless steel pull handles and key lock. Mounted on four casters (two locking). UL/CUL-listed. Available with optional legs instead of casters, extra shelves, up to eight stainless steel drawers, up to six wire basket drawers and stainless steel interior and exterior. Warranties: 18-month parts and labor, 5-year compressor (US and Canada).

#### Specifications:

Shelf area ..... 12.8 sq. ft.

Temperature range ..... 2°C to 10°C

Interior dimensions (H x W x D) ..... 59 x 23½ x 30 in.

Exterior dimensions (H x W x D) ..... 79¾ x 27½ x 34¾ in.

| Cat. No.   | Mfr. No.      | Description             | Qty. |
|------------|---------------|-------------------------|------|
| FR241WMW0M | NSFR241WMW/0M | 24 cu. ft. refrigerator | 1/ea |

### Premier Series Laboratory Freezers

**CARDINAL HEALTH** - Our -30°C high-performance laboratory freezers are designed for medical and scientific applications such as storage of reagents, pharmaceuticals, biologicals or other temperature sensitive laboratory materials. Models offer cabinet sizes to fit a variety of space needs and storage volume requirements.

- Powerful industrial compressors
- Thick CFC-free insulation
- Access port standard
- Adjustable temperature setpoint
- Adjustable temperature alarms
- Built-in contacts for remote alarms
- Self-closing doors
- Adjustable shelves
- Forced air for rapid cooling
- Smart defrost for temperature stability

UL certified.



#### Temperature range: -30°C (auto defrost)

| Cat. No.  | Cu. Ft. | Voltage (Hz) | Amps/<br>Breaker<br>(Plug) | Cabinet      | Door          | Shelves | Int. Dimensions*<br>H x D x W in. | Ext. Dimensions*<br>H x D x W in. | Ship<br>Weight lbs. |
|-----------|---------|--------------|----------------------------|--------------|---------------|---------|-----------------------------------|-----------------------------------|---------------------|
| R3863-2A  | 4.9     | 115 (60)     | 8.0/15 (P1)                | Undercounter | Single, solid | 3       | 20 x 20.5 x 20                    | 33.4 x 26 x 24                    | 220                 |
| R3800-3A  | 11.5    | 115 (60)     | 8.0/15 (P1)                | Space saver  | Single, solid | 4       | 52.4 x 21 x 20                    | 73.6 x 30 x 24                    | 280                 |
| R3800-5A  | 23.3    | 115 (60)     | 16.0/20 (P2)               | Upright      | Single, solid | 4       | 58 x 29 x 24                      | 79.2 x 37.2 x 28                  | 425                 |
| R3800-5D  | 23.3    | 208/230 (60) | 12.0/15 (P4)               | Upright      | Single, solid | 4       | 58 x 29 x 24                      | 79.2 x 37.2 x 28                  | 425                 |
| R3800-6A  | 29.2    | 115 (60)     | 16.0/20 (P2)               | Upright      | Single, solid | 4       | 58 x 29 x 30                      | 79.2 x 37.2 x 34                  | 445                 |
| R3800-6D  | 29.2    | 208/230 (60) | 12.0/15 (P4)               | Upright      | Single, solid | 4       | 58 x 29 x 30                      | 79.2 x 37.2 x 34                  | 445                 |
| R3800-10A | 51.1    | 115 (60)     | 16.0/20 (P2)               | Upright      | Double, solid | 8       | 58 x 29 x 52.5                    | 79.2 x 37.2 x 56.5                | 600                 |
| R3800-10D | 51.1    | 208/230 (60) | 12.0/15 (P4)               | Upright      | Double, solid | 8       | 58 x 29 x 52.5                    | 79.2 x 37.2 x 56.5                | 600                 |

\* Published interior volumes are nominal; useable cu. ft. capacities may be offset by shelves, drawers, blower coils or cabinet protrusions. For specific cabinet dimensions and allowances, or for verification of clearance tolerances, contact our sales representatives. Product performance may be affected by ambient temperature conditions, humidity conditions, sample loading preferences and frequency of door openings. Contact our sales representatives for specific inquiries regarding your application.

# Cold Storage

## Freezers: General Laboratory

### Pro Series Freezers

**CARDINAL HEALTH** - Our freezers deliver stable temperature control over a range of -12°C to -30°C with automated defrost.

- 1 in. access port
- 2 in. dual wheel casters
- Solid door and stainless steel exterior

UL certified.



1 in. access port standard on all refrigerators and freezers



**Temperature range: -12°C to -30°C (auto defrost)**

| Cat. No.          | Cu. Ft. | Voltage (Hz) | Finish          | Door  | Chart Recorder | Shelves | Int. Dimensions H x D x W in. | Ext. Dimensions H x D x W in. | Ship Weight lbs. |
|-------------------|---------|--------------|-----------------|-------|----------------|---------|-------------------------------|-------------------------------|------------------|
| <b>MF25SSSAEE</b> | 24      | 115 (60)     | Stainless steel | Solid | No             | 3       | 60 x 28 x 22                  | 78.5 x 32 x 26                | 392              |
| <b>MF25SSSARE</b> | 24      | 115 (60)     | Stainless steel | Solid | Yes            | 3       | 60 x 28 x 22                  | 78.5 x 32 x 26                | 392              |
| <b>MF34SSSAEE</b> | 34      | 115 (60)     | Stainless steel | Solid | No             | 3       | 60 x 28 x 31                  | 78.5 x 32 x 35                | 429              |
| <b>MF34SSSARE</b> | 34      | 115 (60)     | Stainless steel | Solid | Yes            | 3       | 60 x 28 x 31                  | 78.5 x 32 x 35                | 429              |
| <b>MF49SSSAEE</b> | 48      | 115 (60)     | Stainless steel | Solid | No             | 6       | 60 x 28 x 48                  | 78.5 x 32 x 52                | 630              |
| <b>MF49SSSARE</b> | 48      | 115 (60)     | Stainless steel | Solid | Yes            | 6       | 60 x 28 x 48                  | 78.5 x 32 x 52                | 630              |

### Thermo Scientific Jewett® High-Performance Lab Freezers

**THERMO SCIENTIFIC** - These laboratory freezers are designed for medical and scientific applications such as storage of reagents, pharmaceuticals, biologicals, and other commonly used laboratory materials.

These Jewett® high-performance freezers feature microprocessor control, positive airflow systems, industrial-quality cabinet construction and extra-strength refrigeration compressors selected for industrial, clinical and scientific use.

These high-performance laboratory freezers provide a stable, low-temperature environment for frequently accessed laboratory reagents, pharmaceuticals and biological materials. Factory-preset at -30°C.

Microprocessor control system with audio and visual alarms. Bright digital temperature displays. Alarm silence, ringback and automatic reset functions. Setpoint security with key-operated, triple-position master switch that controls power to all systems.

Audible/visual alarms for high/low temperature and power failure. Battery backup and remote alarm connections.

Rugged, long-life cabinets with smooth, scratch-resistant interiors and exteriors that are easy to clean. Set of four 2 in. (5.2cm) casters included, two locking and two regular.

High-density, CFC-free insulation. Solid self-closing doors with 90° stay-open feature, keyed lock for added sample security. Closed-cell gasket provides a positive door seal to maintain a constant interior temperature.

Directed airflow for fast temperature recovery after door openings.

Painted open-wire shelves are adjustable in 1 in. (2.5cm) increments.

1 in. (2.5cm) insulated access port standard. Heavy-duty, industrial-grade, hermetically sealed compressors. Automatic defrost maintains optimum cooling.

#### Specifications:

Temperature range.....-30°C

Temperature control .....Microprocessor

Defrost .....Automatic (-30°C)

| Cat. No.          | Mfr. No. | Description                        | Qty. |
|-------------------|----------|------------------------------------|------|
| <b>JLF430-115</b> | JLF430A  | 4.9 cu. ft. - 115V                 | 1/ea |
| <b>JLF430D</b>    | JLF430D  | 4.7 cu. ft. - 230V                 | 1/ea |
| <b>JLF1230A</b>   | JLF1230A | 11.5 cu. ft. - 115V                | 1/ea |
| <b>JLF2330A</b>   | JLF2330A | 23.3 cu. ft. - 115V                | 1/ea |
| <b>JLF2330D</b>   | JLF2330D | 23.3 cu. ft. - 230V                | 1/ea |
| <b>JLF3030A</b>   | JLF3030A | 29.2 cu. ft. - 115V                | 1/ea |
| <b>JLF5030D</b>   | JLF5030D | 51.1 cu. ft. - 230V - 2-door model | 1/ea |



### Thermo Scientific Revco® High-Performance Lab Freezers

THERMO SCIENTIFIC - Revco® high-performance lab freezers feature microprocessor control for simplified operation and greater accuracy.

These Revco® -30°C automatic defrost and -20°C manual defrost high-performance freezers are designed for medical and scientific applications such as storage of reagents, pharmaceuticals, biologicals or other commonly used laboratory materials. Models offer cabinet sizes to fit a variety of space needs and storage volume requirements.

- Temperature factory preset at -20°C (manual defrost) or -30°C (automatic defrost)
- Icon-based controls and displays
- Large, easy-to-read digital display shows temperature within 1°C
- Graphic thermometer is steady green when temperature is normal, flashes top bar for overtemperature, flashes bulb for undervoltage
- Audible/visual warnings for overtemperature, undervoltage or power failure
- Key-operated OFF/ON/ALARM ON master switch for setpoint security
- Alarm silence, ringback, auto reset, remote alarm contacts
- Controller battery backup system
- High-density, 2 in. thick (5.1cm) CFC-free urethane foam insulation protects against ambient temperature fluctuations
- CFC-free, HFC-blend refrigerant
- Single-door models are hinged on right
- Full-length door handle and key lock, doors self-close and lock open at 90°
- Adjustable epoxy-coated wire shelves
- 1 in. (2.5cm) dia. access port with plug on undercounter model

#### -30°C freezers—automatic defrost

- Automatic defrost and condensate removal
- Sensor automatically initiates defrost cycle on demand, eliminating need for a defrost timer, minimizing frost buildup and optimizing coil efficiency
- Forced-air circulation improves temperature uniformity, providing faster recovery after door is opened

#### -20°C freezers—manual defrost

- Suitable for applications in which slight intermittent coil warming during an automatic defrost cycle is not desired (such as enzyme storage)
- Gravity convection air system for maximum stability without a blower or fan, manual defrost

| Cat. No.  | Mfr. No. | Description  | Qty. |
|-----------|----------|--|------|
| R3929-7A  | ULT430A  | 4.9 cu. ft., -30°C freezer, 115V                         | 1/ea |
| ULT1230-A | ULT1230A | 11.5 cu. ft., -30°C freezer, 115V                        | 1/ea |
| C1800-43  | ULT2330A | 23.3 cu. ft., -30°C freezer, 115V                        | 1/ea |
| ULT3030-A | ULT3030A | 29.2 cu. ft., -30°C freezer, 115V                        | 1/ea |
| ULT5030-A | ULT5030A | 51.1 cu. ft., -30°C freezer, 115V                        | 1/ea |
| R3803-20A | UGL2320A | 23.3 cu. ft., -20°C freezer, manual defrost, 115V        | 1/ea |
| R3803-25A | UEN2320A | 23.3 cu. ft., -20°C enzyme freezer, manual defrost, 115V | 1/ea |

# Cold Storage

## Freezers: General Laboratory



### Thermo Scientific™ Value Lab Freezers

THERMO SCIENTIFIC - These lab freezers provide an economical solution for safe sample storage. All units are factory-tested prior to shipment; NRTL-listed and have non-CFC refrigerants. Units are intended for basic laboratory storage only. Storage of high-value, life science materials or clinical biologicals may require alarm, monitoring, back-up and temperature performance features. These units are not suitable for corrosive environments.

| Cat. No. | Mfr. No. | Description  | Qty. |
|----------|----------|--|------|
| R4038-5  | 3752-DB  | 5 cu. ft. freezer, 115V, -12°C to -20°C, manual defrost    | 1/ea |
| B3767A   | 3767A    | 20.6 cu. ft. freezer, 115V, -12°C to -20°C, manual defrost | 1/ea |



### Thermo Scientific™ Value Undercounter Freezer

THERMO SCIENTIFIC - This undercounter freezer provides low-temperature storage. It features external controls with an adjustable thermostat that has a deep freeze setting and an over-temperature warning with visual alarm. Other features include three fixed bins, manual defrost and a built-in keylock for added safety. CFC-free insulation and coolant. UL listed.

#### Specifications:

Capacity ..... 3.2 cu. ft.  
Temperature range ..... -12°C to -20°C  
Power requirements ..... 120V, 60 Hz, 144W

#### Dimensions (H x W x D)

Interior ..... 24½ x 17¾ x 16½ in.  
Exterior ..... 33½ x 23½ x 23½ in.

| Cat. No. | Mfr. No. | Description                         | Qty. |
|----------|----------|-------------------------------------|------|
| R4038-9  | 3753     | 3.2 cu. ft. low-temperature freezer | 1/ea |



## Expertise

**Cardinal Health is an experienced, dependable partner that knows the lab business and solves problems.**

- **60 years of experience serving laboratories.**
- **Dependable service, with tenured representatives who are committed to understanding and attending to customers' needs.**
- **Sales representatives who help educate lab managers about their options with comparative information about different manufacturers and products.**
- **Specialty customer service team that manages high-volume, high-value and perishable materials.**
- **Extensive supply chain and logistics expertise.**



### Enzyme Laboratory Freezer

NOR-LAKE SCIENTIFIC - Supplied with nine epoxy-coated wire shelves for ample enzyme storage, this freezer has a microprocessor control with LED digital display and accuracy to within 1°C. Temperature is preset at -20°C and there are high/low audible and visual alarms and remote alarm contacts to alert you of fluctuations. The exterior front, sides, back and door are white baked-on enamel. The exterior top and bottom are galvanized steel. The interior liner and door panel are smooth aluminum. Cabinet and doors are foamed-in-place with high-density polyurethane foam insulation.

Freezer offers manual defrost, complete top-mounted refrigeration system and cold-wall evaporator. Self-closing solid door with magnetic door gasket, heavy-duty, spring-loaded hinges, full-length stainless steel pull handles, key lock and doorframe heater wires. Mounted on four casters (two locking). Available with several optional features, including up to eight stainless steel drawers, up to eight wire basket drawers, temperature chart recorder, 4-20ma, stainless steel interior and exterior and lead access ports. UL/CUL-listed. Warranties: 18-month parts and labor, 5-year compressor (US and Canada).

#### Specifications:

|                                       |                     |
|---------------------------------------|---------------------|
| Shelf area .....                      | 40.2 sq. ft.        |
| Temperature range .....               | -25°C to -10°C      |
| Interior dimensions (H x W x D) ..... | 59 x 23½ x 30 in.   |
| Exterior dimensions (H x W x D) ..... | 79¾ x 27½ x 34¾ in. |

| Cat. No.   | Mfr. No.      | Description             | Qty. |
|------------|---------------|-------------------------|------|
| ZF241WMW0M | NSZF241WMW/0M | 24 cu. ft. - 115V, 60Hz | 1/ea |



### Premier Laboratory Freezers

NOR-LAKE SCIENTIFIC - These laboratory freezers are designed for heavy-duty use and are available with one, two or three solid doors. They feature a top-mounted non-CFC refrigeration system, air-cooled condensing unit, automatic condensate evaporators, automatic defrost and microprocessor control with integrated LED visual display and warm/cold audible and visual alarm.

The freezer cabinet is formed-in-place with high-density polyurethane foam insulation. The exterior front, sides, back and doors are painted white, while exterior top and bottom are galvanized steel. The interior liner and interior door panel are white and there are three epoxy-coated wire shelves per door. Doors have heavy-duty pivot hinges, pull handles with centered key locks and self-adjusting magnetic gaskets. There are four casters (two locking) on one- and two-door models and six casters (three locking) on three-door models. Preset at -25°C. UL- and CUL-listed.

#### Specifications:

|                          |               |
|--------------------------|---------------|
| Temperature range .....  | 25°C to -10°C |
| Power requirements ..... | 115V, 60 Hz   |

#### PF241WWW0

|                              |  |
|------------------------------|--|
| Dimensions (H x W x D) ..... | Interior: 59 x 23½ x 30 in.<br>Exterior: 79¾ x 27½ x 34¾ in. |
|------------------------------|--|

#### PF331WWW0 (H x W x D)

|                              |  |
|------------------------------|--|
| Dimensions (H x W x D) ..... | Interior: 67 x 27¾ x 31 in.<br>Exterior: 87¾ x 31¾ x 35¾ in. |
|------------------------------|--|

#### PF522WWW0 (H x W x D)

|                              |  |
|------------------------------|--|
| Dimensions (H x W x D) ..... | Interior: 59 x 51 x 30 in.<br>Exterior: 79¾ x 55 x 34¾ in. |
|------------------------------|--|

| Cat. No.  | Mfr. No.     | Description                                       | Qty. |
|-----------|--------------|---|------|
| PF241WWW0 | NSPF241WWW/0 | 24 cu. ft. - 12.8 sq. ft.<br>shelf area - 1 door  | 1/ea |
| PF331WWW0 | NSPF331WWW/0 | 33 cu. ft. - 15.9 sq. ft.<br>shelf area - 1 door  | 1/ea |
| PF522WWW0 | NSPF522WWW/0 | 52 cu. ft. - 28.6 sq. ft.<br>shelf area - 2 doors | 1/ea |

# Cold Storage

## Freezers: General Laboratory



### Premier Glass-Door Low-Temperature Freezer

NOR-LAKE SCIENTIFIC - Ideal for laboratory and pharmacy storage, these heavy-duty freezers have full-size, double-pane glass doors to view inside contents. Available with one or two doors, freezers have white interior with three epoxy-coated shelves per door. The exterior front, sides and back are white and the exterior top and bottom are galvanized steel. The complete cabinet is foamed-in-place with high-density polyurethane foam insulation. Doors have heavy-duty pivot hinges and pull handles with centered key lock.

Freezers also feature top-mounted refrigeration system, air-cooled condensing unit, automatic condensate evaporation, auto defrost, door-opening heaters and interior light. They are mounted on four casters for convenient mobility. Factory preset operating temperature is -20°C. UL/CUL-listed. Freezers are also optionally available with legs instead of casters, stainless steel drawers, extra shelves, stainless steel interior and exterior, high/low audible alarm with remote alarm controls and temperature chart recorder. Digital LED display microprocessor temperature controller. Warranties: 18-month parts and labor, 5-year compressor (US and Canada). Models rated for 115V, 1PH, 60H includes: power cord with NEMA 5-20 plug.

#### Specifications:

Temperature range ..... -15°C to -25°C

#### XF211WWG0

Dimensions (H x W x D).....Interior 59 x 23½ x 30 in.  
Exterior 81½ x 27½ x 35½ in.

#### XF482WWG0

Dimensions (H x W x D).....Interior 59 x 51 x 30 in.  
Exterior 83¼ x 55 x 35½ in.



### Premier Low-Temperature Laboratory Freezer

NOR-LAKE SCIENTIFIC - Designed for heavy-duty laboratory and pharmacy storage, this freezer features a digital LED microprocessor control with high/low visual alarm and remote alarm contacts. Also features a top-mounted, non-CFC refrigeration system, air-cooled condensing unit, automatic condensate evaporator and automatic defrost. Freezer has white interior with three epoxy-coated shelves per door. The exterior front, sides and back are white baked-on enamel and the exterior top and bottom are galvanized steel. The cabinet and doors are foamed-in-place with high-density polyurethane foam insulation. Doors have heavy-duty pivot hinges, full-length stainless steel pull handles and centered key locks, magnetic door gasket and interior light.

Mounted on four casters for convenient mobility. Operating temperature factory preset to -30°C. UL/CUL-listed. Warranties: 18-month parts and labor, 5-year compressor (US and Canada). Available with optional features including chart recorder, stainless steel interior and exterior, extra shelves, stainless steel drawers (eight per door), wire drawers baskets (eight per door) and lead access ports. This model is rated for 115V, 1PH, 60H includes: power cord with NEMA 5-20 plug.

#### Specifications:

Temperature range ..... -30°C to -20°C

Interior dimensions (H x W x D) ..... 50 x 51 x 30 in.

Exterior dimensions (H x W x D) ..... 83¼ x 55 x 34¾ in.

| Cat. No.         | Mfr. No.     | Description                           | Qty. |
|------------------|--------------|---------------------------------------|------|
| <b>XF482WWW0</b> | NSXF482WWW/0 | 52 cu. ft. - 39.7 sq. ft. - 6 shelves | 1/ea |

| Cat. No.         | Mfr. No.     | Description   | Qty. |
|------------------|--------------|---|------|
| <b>XF211WWG0</b> | NSXF211WWG/0 | 22.5 cu. ft. - 18.3 sq. ft.<br>shelf area - 3 shelves | 1/ea |
| <b>XF482WWG0</b> | NSXF482WWG/0 | 48.8 cu. ft. - 39.7 sq. ft.<br>shelf area - 6 shelves | 1/ea |

## Freezers: General Laboratory

### Biomedical Laboratory Upright Freezers

PANASONIC - Panasonic's MDF Series biomedical freezers offer the reliability and performance required in a wide variety of storage and research applications. In the medical field, they provide effective storage of life-saving fresh and frozen blood supplies and vaccines, as well as samples for diagnosis. In the biotechnology field, they provide effective storage of enzymes for genetic research, as well as culture media, reagents and samples for testing. As a storage environment with easy operability and a host of other features, these freezers offer reliability and functionality for short- or intermediate-term storage at temperatures as low as -30°C.

Additional features include:

- Front-mounted display/control panel (with new microprocessor) located at convenient waist height
- Memory backup
- Temperature display
- Front access calibration for 7-day temperature recorder



MDF-U731M model shown

#### Specifications:

Temperature range ..... -20°C to -30°C at 35°C

Power requirements ..... 115V, 60Hz

#### MDF-U333

Baskets ..... 4 large, 1 small

Dimensions (W x D x H) ..... Interior 19.3 x 19.1 x 50.8 in.  
Exterior 24.2 x 28.9 x 63.8 in.

#### MDF-U5312

Dimensions (W x D x H) ..... Interior 25.9 x 23.9 x 50.1 in.  
Exterior 31.5 x 30.4 x 70.9 in.

#### MDF-U731 (auto defrost)

Dimensions (W x D x H) ..... Interior 25.6 x 27.5 x 59.8 in.  
Exterior 30.3 x 32.7 x 77 in.

#### MDF-U731M (manual defrost)

Dimensions (W x D x H) ..... Interior 25.6 x 27.5 x 59.8 in.  
Exterior 30.3 x 32.7 x 77 in.

| Cat. No.         | Mfr. No.     | Description  | Qty. |
|------------------|--------------|--------------|------|
| <b>MDF-U333</b>  | MDF-U334-PA  | 9.7 cu. ft.  | 1/ea |
| <b>MDF-U5312</b> | MDF-U5312-PA | 17.0 cu. ft. | 1/ea |
| <b>MDF-U731</b>  | MDF-U731     | 22.0 cu. ft. | 1/ea |
| <b>MDF-U731M</b> | MDF-U731M    | 24.4 cu. ft. | 1/ea |

## Right products, right time.



# Cold Storage

## Freezers: Blood Bank/Plasma

### Premier Series Plasma Freezers

**CARDINAL HEALTH** - Our -30°C plasma freezers are designed to meet AABB, ANRC and FDA standards for safety and performance in plasma storage. Cabinet options include full-extension roll-out drawers to meet a variety of space needs and storage volume requirements.

- Powerful industrial compressors
- Thick CFC-free insulation
- Access port standard
- Adjustable temperature setpoint
- Adjustable temperature alarms
- Built-in contacts for remote alarms
- Self-closing doors
- Adjustable steel drawers
- Built-in chart recorder (freestanding on 4.9 cu. ft.)
- Automatic alarm test
- Additional lower temperature probe
- Smart defrost for temperature stability

UL certified.



**Temperature range: -30°C (auto defrost)**

| Cat. No.  | Cu. Ft.<br>(Box Capacity) | Voltage (Hz) | Amps/<br>Breaker<br>(Plug) |              |               |         | Int. Dimensions*<br>H x D x W in. | Ext. Dimensions*<br>H x D x W in. | Ship<br>Weight lbs. |
|-----------|---------------------------|--------------|----------------------------|--------------|---------------|---------|-----------------------------------|-----------------------------------|---------------------|
|           |                           |              |                            | Cabinet      | Door          | Drawers |                                   |                                   |                     |
| R3863-3A  | 4.9 (78)                  | 115 (60)     | 8.0/15 (P1)                | Undercounter | Single, solid | 2       | 20 x 20.5 x 20                    | 33.4 x 26 x 24                    | 220                 |
| R3850-3A  | 11.5 (273)                | 115 (60)     | 8.0/15 (P1)                | Space saver  | Single, solid | 7       | 52.4 x 21 x 20                    | 73.6 x 30 x 24                    | 365                 |
| R3850-5A  | 23.3 (532)                | 115 (60)     | 16.0/20 (P2)               | Upright      | Single, solid | 7       | 58 x 29 x 24                      | 79.2 x 37.2 x 28                  | 425                 |
| R3850-5D  | 23.3 (532)                | 208/230 (60) | 12.0/15 (P4)               | Upright      | Single, solid | 7       | 58 x 29 x 24                      | 79.2 x 37.2 x 28                  | 425                 |
| UPF3030A  | 29.2 (665)                | 115 (60)     | 16.0/20 (P2)               | Upright      | Single, solid | 6       | 58 x 29 x 30                      | 79.2 x 37.2 x 34                  | 580                 |
| UPF3030D  | 29.2 (665)                | 208/230 (60) | 12.0/15 (P4)               | Upright      | Single, solid | 6       | 58 x 29 x 30                      | 79.2 x 37.2 x 34                  | 580                 |
| R3850-10A | 51.1 (1064)               | 115 (60)     | 16.0/20 (P2)               | Upright      | Double, solid | 14      | 58 x 29 x 52.5                    | 79.2 x 37.2 x 56.5                | 600                 |
| R3850-10D | 51.1 (1064)               | 208/230 (60) | 12.0/15 (P4)               | Upright      | Double, solid | 14      | 58 x 29 x 52.5                    | 79.2 x 37.2 x 56.5                | 600                 |

\* Published interior volumes are nominal; useable cu. ft. capacities may be offset by shelves, drawers, blower coils or cabinet protrusions. For specific cabinet dimensions and allowances, or for verification of clearance tolerances, contact our sales representative. Product performance may be affected by ambient temperature conditions, humidity conditions, sample loading preferences and frequency of door openings. Contact our sales representative for specific inquiries regarding your application.

## Freezers: Blood Bank/Plasma

### Thermo Scientific Jewett® High-Performance Plasma Freezers

THERMO SCIENTIFIC - Jewett® high-performance plasma freezers are designed to meet the highest standards for sensitive plasma freezing.

These high-performance plasma freezers feature easy-to-use microprocessor controls and meet storage requirements large and small.

- High-density, CFC-free, blown-in insulation conforms to cabinet shape, to reduce gaps and increase temperature uniformity
- Powerful, industrial-grade compressors for optimal product protection and adjustable stainless steel drawers
- 1 in. insulated access port standard
- Positive, forced-air circulation maintains temperature uniformity throughout the cabinet
- Set of four 2 in. casters: two locking and two regular
- Lockable doors for added sample security
- Standard inkless, 7-day graphic temperature chart recorder
- Bright digital temperature display
- Microprocessor control system with audio and visual alarms
- Preset -30°C cabinets
- Hospital-grade plug



| Cat. No. | Mfr. No. | Description                     | Qty. |
|----------|----------|---------------------------------|------|
| JPL430A  | JPL430A  | 4.7 cu. ft. - 115V - 2 drawers  | 1/ea |
| JPL430D  | JPL430D  | 4.7 cu. ft. - 240V - 2 drawers  | 1/ea |
| JPL1230A | JPL1230A | 11.5 cu. ft. - 115V - 7 drawers | 1/ea |
| JPL2330A | JPL2330A | 23.3 cu. ft. - 115V - 7 drawers | 1/ea |
| JPL2330D | JPL2330D | 23.3 cu. ft. - 240V - 7 drawers | 1/ea |
| JPL3030A | JPL3030A | 29.2 cu. ft. - 115V - 7 drawers | 1/ea |
| JPL3030D | JPL3030D | 29.2 cu. ft. - 240V - 7 drawers | 1/ea |

### Thermo Scientific Jewett® Undercounter Plasma Freezer

THERMO SCIENTIFIC - Jewett® undercounter freezers safely meet small storage requirements at -30°C. They are ideal for small storage needs and for confined spaces. Includes: HemaPro 101-3000 monitor.

Features include:

- Frost-free (hot gas or electric) operation
- CFC-free refrigerant
- HemaPro 101-3000 monitor alerts to unsafe conditions
- Storage for up to 88 (300mL) plasma packs
- Forced-air circulation system for maximum temperature uniformity and rapid recovery times
- Single door, two drawers

#### Specifications:

Capacity ..... 5.4 cu. ft. (153L)  
 Interior dimensions (D x W x H) ..... 21.5 x 19.37 x 20.37 in.  
 Exterior dimensions (L x W x H) ..... 24.12 x 24 x 36 in.



| Cat. No.  | Mfr. No.  | Description  | Qty. |
|-----------|-----------|--|------|
| CTF306-1B | CTF306-1B | Undercounter freezer - stainless steel - 5.4 cu. ft. | 1/ea |

# Cold Storage

## Freezers: Blood Bank/Plasma

### Thermo Scientific Revco® High-Performance Plasma Freezers

THERMO SCIENTIFIC - Revco® high-performance plasma freezers feature microprocessor control for simplified operation and greater accuracy.

These -30°C plasma freezers are designed to meet AABB and FDA standards for safety and performance in plasma storage. Five models offer cabinet sizes to meet a variety of space needs and storage volume requirements.

Automatic condensate removal and defrost, with sensor that automatically initiates defrost cycle on demand, eliminating need for a defrost timer, minimizing frost buildup and optimizing coil efficiency. Icon-based controls and displays. Preset temperature setpoint.

- Graphic thermometer is steady green when temperature is normal, flashes top bar for overtemperature, bulb for undertemperature
- Large, easy-to-read digital display shows temperature within 1°C
- Audible/visual warnings for overtemperature, undertemperature or power failure
- Key-operated OFF/ON/ALARM ON master switch for setpoint security
- Alarm silence, ringback and auto reset; remote alarm contacts
- Controller battery backup system
- Adjustable leveling feet
- High-density, CFC-free urethane foam insulation protects cabinet interior from ambient temperature fluctuations, minimizing operating costs
- Positive, forced-air circulation maintains uniformity at all shelf levels
- Directional airflow assures quick recovery after door openings



- Heavy-duty, hermetically sealed compressors
- 1 in. (2.5cm) access port with plug on undercounter model only

#### Specifications:

Temperature range ..... -30°C  
Temperature resolution ..... 1°C  
Temperature control ..... microprocessor

| Cat. No.  | Mfr. No. | Description                        | Qty. |
|-----------|----------|------------------------------------|------|
| UFP430-A  | UFP430A  | 4.9 cu. ft. plasma freezer - 115V  | 1/ea |
| UFP1230-A | UFP1230A | 11.5 cu. ft. plasma freezer - 115V | 1/ea |
| UFP2330-A | UFP2330A | 23.3 cu. ft. plasma freezer - 115V | 1/ea |
| UFP3030-A | UFP3030A | 29.2 cu. ft. plasma freezer - 115V | 1/ea |
| UFP5030-A | UFP5030A | 51.1 cu. ft. plasma freezer - 115V | 1/ea |

### Plasma Freezers -30°C

NOR-LAKE SCIENTIFIC - Designed for secure plasma storage, these freezers feature a programmable logic microprocessor controller with LCD control panel and message center. They provide continuous product temperature display and include temperature chart recorder and chart paper. An air probe monitors temperature and includes high/low alarms, both audible and visual. Freezers offer two levels of user password protection: setpoints and parameters. There is a door-ajar alarm with adjustable delay, a power failure alarm and a 100-event alarm log that includes date/time stamp and product temperatures. Operating temperature is -30°C.

Available with one or two doors, freezers feature streamlined design to optimize airflow and maintain temperature uniformity. They have eight solid pullout stainless steel drawers per door. The units have a capacity of 48 to 300mL packs per drawer. The interior and exterior front, sides



and back are painted white. Complete cabinet is foamed-in-place with high-density polyurethane foam insulation. Doors have heavy-duty pivot hinges, full-length pull handles and key locks. Freezers also feature auto defrost and recessed interior light. They are mounted on four casters (two locking) for convenient mobility. UL/CUL-listed. Designed to meet AABB, ANRC and FDA requirements for plasma storage. Freezers are available with optional shelves, wire basket drawers, 4-20mA output, stainless steel interior and exterior. These models are rated for 115V, 1PH, 60Hz includes: power cord with NEMA 5-20 plug. Warranties: 18-month parts and labor, 5-year compressor (US and Canada).

#### Specifications:

**BF211WWW0**  
Dimensions (H x W x D) ..... Interior 59 x 23½ x 30 in.  
Exterior 81½ x 27½ x 34¾ in.

**BF482WWW0**  
Dimensions (H x W x D) ..... Interior 59 x 51 x 30 in.  
Exterior 83¼ x 55 x 34¾ in.

| Cat. No.  | Mfr. No.     | Description                      | Qty. |
|-----------|--------------|----------------------------------|------|
| BF211WWW0 | NSBF211WWW/0 | 24 cu. ft. - 1 door, 8 drawers   | 1/ea |
| BF482WWW0 | NSBF482WWW/0 | 52 cu. ft. - 2 doors, 16 drawers | 1/ea |

# Cold Storage

## Freezers: Blood Bank/Plasma



### Undercounter Plasma Freezer

NOR-LAKE SCIENTIFIC - This compact plasma freezer features an industrial-quality cabinet and heavy-duty refrigeration system and is preset at -30°C. The exterior is white and the back and bottom are made of galvanized steel. The interior liner and door panel are aluminum. There is one adjustable gray epoxy-coated shelf.

The freezer has a base-mount non-CFC refrigeration system, an air-cooled condensing unit, automatic defrost, four 4 in. legs, magnetic door gasket, pull handle and key lock. The cabinet and door are foamed-in-place with high-density polyurethane foam insulation. Freezer includes digital LED display microprocessor temperature controller, high/low product alarm, freestanding chart recorder, remote contacts, key door lock, 1 in. diameter sensor access port, four 4 in. legs and one coated wire shelf. Casters are optional. UL/CUL-listed. Warranties: 18-month parts and labor, 5-year compressor (US and Canada). Meets AABB, ANRL and FDA requirements for plasma storage.

#### Specifications:

Shelf area ..... 3.1 sq. ft.  
Adjustable height ..... 34 to 35½ in.

#### Dimensions (H x W x D)

Interior ..... 22⅝ x 23 x 19½ in.  
Exterior ..... 34 x 27 x 25 in.

| Cat. No.         | Mfr. No.     | Description              | Qty. |
|------------------|--------------|--------------------------|------|
| <b>BF051WMW0</b> | NSBF051WMW/0 | 5.0 cu. ft. - 115V, 60Hz | 1/ea |

## Freezers: General-Purpose



### 4CAF General-Purpose Freezers

AGA MARVEL SCIENTIFIC - These 4.5 cu. ft. freezers feature forced-air ventilation, which helps eliminate the need for clearance space in built-in applications. They fit easily under lab benches and casework. They also feature a manual defrost system that protects freezer contents from auto defrost thaws and dehydration. Freezers have positive-close door hinges, flat door liners, one wire shelf, adjustable microprocessor-based thermostat and manual defrost. Commercial UL- and CUL-listed. Use non-CFC refrigerant.

#### Specifications:

Temperature range ..... -23°C to -18°C  
Volume ..... 4.5 cu. ft.  
Interior dimensions (H x W x D) ..... 24¾ x 19 x 18½ in.  
Exterior dimensions (H x W x D) ..... 34 x 23⅞ x 24 in.  
Power requirements ..... 115VAC, 60 Hz, 3.3A

| Cat. No.                          | Mfr. No. | Description         | Qty. |
|-----------------------------------|----------|---------------------|------|
| <b>Right-hand hinged freezers</b> |          |                     |      |
| <b>4CAF7001</b>                   | 4CAF7100 | 4.5 cu. ft.         | 1/ea |
| <b>4CAF7049</b>                   | 4CAF7102 | Lock and probe port | 1/ea |



### 6CAF General-Purpose Freezers

AGA MARVEL SCIENTIFIC - These freezers feature forced-air ventilation that eliminates the need for clearance in built-in applications. A manual defrost system protects freezer contents from auto defrost thaws and dehydration. The freezers include one wire shelf, three door shelves and an adjustable microprocessor-based thermostat. They also feature a jacketed commercial power cord with hospital-grade plug, positive-close door hinges and shelf retaining bar. Commercial UL- and CUL-listed. Use non-CFC refrigerant.

#### Specifications:

Temperature range ..... -12°C to -7°C  
Volume ..... 6.1 cu. ft.  
Interior dimensions (H x W x D) ..... 27½ x 21 x 21 in.  
Exterior dimensions (H x W x D) ..... 34 x 23⅞ x 24 in.  
Power requirements ..... 115VAC, 60 Hz, 3.3A

| Cat. No.        | Mfr. No. | Description                                     | Qty. |
|-----------------|----------|---|------|
| <b>6CAF7001</b> | 6CAF7100 | 6.1 cu. ft.                                     | 1/ea |
| <b>6CAF7038</b> | 6CAF7102 | With door lock and probe port, right-hand hinge | 1/ea |

# Cold Storage

## Freezers: General-Purpose



### 15CAF General-Purpose Freezer

AGA MARVEL SCIENTIFIC - This freezer is ideal for countertop or built-in use. Forced-air ventilation eliminates the need for clearance space in built-in applications. Features manual defrost that protects freezer contents from auto defrost cycle thaws and dehydration. The freezer also features positive-close door hinges, adjustable mechanical thermostat, flat inner door and manual defrost. Commercial UL- and CUL-listed. Uses non-CFC R134a refrigerant.

#### Specifications:

|                                       |                              |
|---------------------------------------|------------------------------|
| Temperature range .....               | -20°C                        |
| Volume .....                          | 1.5 cu. ft.                  |
| Interior dimensions (H x W x D) ..... | 12 x 11 1/4 x 17 5/8 in.     |
| Exterior dimensions (H x W x D) ..... | 24 1/4 x 14 7/8 x 22 1/8 in. |
| Power requirements .....              | 115VAC, 60 Hz, 3.3A          |

| Cat. No. | Mfr. No. | Description             | Qty. |
|----------|----------|-------------------------|------|
| 15AF0001 | 15CAF120 | General-purpose freezer | 1/ea |



### General-Purpose Laboratory Freezer Upright Defrost

NOR-LAKE SCIENTIFIC - Available with auto, forced air and manual defrost. Both units feature interior light, lock with pop-out key, two adjustable leg levelers, one full access sliding storage basket and automatic door closers. Units come with a 12-month parts warranty.

These units feature a white interior, exterior, door and handle. Operating temperature of -10°C to -20°C with adjustable temperature control. The cabinet is foamed-in-place with CFC-free high-density polyurethane foam insulation.

Manual defrost units feature three white evaporator shelves, five full-width fixed door bins and a defrost drain. Auto defrost forced-air units feature four fixed-position wire shelves, six full-width fixed door bins, power-on light and temperature alarm system with buzzer and light.

#### Specifications:

##### Manual defrost model

|                                       |                          |
|---------------------------------------|--------------------------|
| Interior dimensions (W x D x H) ..... | 27 1/2 x 21 1/2 x 52 in. |
| Exterior dimensions (W x D x H) ..... | 32 x 30 1/2 x 64 1/2 in. |

##### Auto defrost model

|                                       |                              |
|---------------------------------------|------------------------------|
| Interior dimensions (W x D x H) ..... | 27 1/2 x 23 1/2 x 57 1/2 in. |
| Exterior dimensions (W x D x H) ..... | 32 x 30 3/4 x 70 5/8 in.     |

| Cat. No.   | Mfr. No.    | Description                   | Qty. |
|------------|-------------|-------------------------------|------|
| LF161WWW0M | LF161WWW/0M | 17.1 cu. ft. - manual defrost | 1/ea |
| LF201WWW0  | LF201WWW/0  | 20.5 cu. ft. - auto defrost   | 1/ea |



### 25CM General-Purpose Ice Machine

AGA MARVEL SCIENTIFIC - This ice machine produces up to 12 lbs. of ice per day and stores 15 lbs. Crescent-shaped ice cubes are the perfect size for sports medicine and other commercial applications. The ice machine features compact footprint, flat inner door and jacketed commercial power cord. Forced-air ventilation helps eliminate the need for clearance space in built-in applications. No drain is required. Commercial UL- and CUL-listed. Uses non-CFC R134a refrigerant.

#### Specifications:

|                                       |                          |
|---------------------------------------|--------------------------|
| Temperature range .....               | -18°C to -7°C            |
| Power requirements .....              | 115VAC, 60 Hz, 3.3A      |
| Interior dimensions (H x W x D) ..... | 12 x 11 1/4 x 17 5/8 in. |
| Exterior dimensions (H x W x D) ..... | 34 x 14 7/8 x 22 1/8 in. |

| Cat. No. | Mfr. No. | Description                 | Qty. |
|----------|----------|-----------------------------|------|
| 25CM0002 | 25CM0112 | General-purpose ice machine | 1/ea |

### General-Purpose Laboratory Freezer

NOR-LAKE SCIENTIFIC - Designed for convenience and durability, these general-purpose freezers have an internal chamber thermometer that is preset at -20°C. The exterior front, sides, back and door are white baked-on enamel. The exterior top and bottom are galvanized steel. The interior liner and interior door panel are smooth aluminum and there are three epoxy-coated adjustable wire shelves. The cabinet and doors are foamed-in-place with high-density polyurethane foam insulation.

Freezers offer manual defrost, top-mounted refrigeration system, cold wall evaporator and air-cooled condensing unit. Other features include self-closing solid door with magnetic door gasket, heavy-duty spring-loaded hinges, door-opening heaters, full-length stainless steel pull handles and key lock. Freezers are mounted on four casters (two locking). Freezers are also available with optional legs instead of casters, extra shelves, stainless steel interior and exterior, chart recorder, stainless steel drawers and digital thermometer with alarm. UL- and CUL-listed.

#### Specifications:

Shelf area ..... 12.9 sq. ft.  
Temperature range ..... -25°C to -10°C

#### Dimensions (H x W x D)

Interior ..... 59 x 23½ x 30 in.  
Exterior ..... 80¾ x 27½ x 34¾ in.



### Undercounter and Freestanding Freezer

NOR-LAKE SCIENTIFIC - Designed for general laboratory and pharmacy storage, this compact freezer has two fixed-position shelves and three removable clear-plastic storage bins. The exterior is painted white and the back and bottom are galvanized steel. The interior liner and door panel are white vacuum-formed poly with seamless rounded corners for easy cleaning.

The unit can be built-in on three sides and features a base-mount refrigeration system, manual defrost, two leveling legs, magnetic gasket, reversible door with handle and lock. Also includes a color-coded thermostatic control. Operating temperature is -20°C. Freezer is also available with optional digital thermometer with alarm, stacking kit and freestanding chart recorder. UL- and CUL-listed. 12-month parts warranty.

#### Specifications:

Shelf area ..... 3.11 sq. ft.  
Temperature range ..... -20°C to -10°C  
Power requirements ..... 115V, 60 Hz

#### Dimensions (H x W x D)

Interior ..... 24 x 17½ x 16½ in.  
Exterior ..... 33½ x 23 x 23½ in.

| Cat. No.   | Mfr. No.    | Description | Qty. |
|------------|-------------|-------------|------|
| LF041WWW0M | LF041WWW/0M | 3.5 cu. ft. | 1/ea |

### Undercounter Freezer

NOR-LAKE SCIENTIFIC - Designed for general laboratory and pharmacy storage, these compact freezers can be built-in on three sides, as the air intake and exhaust is through the base in front. Available with forced-air evaporator and automatic defrost or wraparound cold-wall evaporator and manual defrost. Both units have one adjustable gray epoxy-coated shelf. The exterior is painted white enamel and the back and bottom are made of galvanized steel; interior liner and door panel are aluminum. The units feature a base-mount refrigeration system, air-cooled condensing unit, four 4 in. legs, magnetic gasket, pull door handle and door lock. Operating temperature is -20°C. The cabinet and door are foamed-in-place with high-density polyurethane foam insulation. UL- and CUL-listed.



Model LF051WMW0 (auto defrost) includes digital LED display microprocessor controller with warm and cold audible and visual alarms with remote alarm contacts. Warranties: 18-month parts and labor, 5-year compressor (US and Canada).

#### Specifications:

Shelf area ..... 2.6 sq. ft.  
Temperature range ..... -20°C to -10°C  
Power requirements ..... 115V, 60 Hz

#### Dimensions (H x W x D)

Interior ..... 22¾ x 23 x 19½ in.  
Exterior ..... 34 x 27 x 25 in.

| Cat. No.  | Mfr. No.     | Description | Qty. |
|---|--------------|-------------|------|
| Forced air model with auto defrost - microprocessor control | NSLF051WMW/0 | 6 cu. ft.   | 1/ea |

# Cold Storage

## Freezers: General-Purpose

### 5.0 cu. ft. Undercounter Freezers

PANASONIC - Save valuable space in your laboratory with these undercounter freezers. They have an operating temperature of -20°C. The chamber has two fixed shelves with one removable bottom shelf and two door shelves. Freezer HF-5015WSEC features a hasp lock for security.

#### Specifications:

Temperature range. .... -20°C to -15°C  
Exterior dimensions. .... 21.4 x 25.4 x 33.4 in.  
Power requirements ... 115V, 60 Hz, 1.1A



HF-5020W model shown

| Cat. No.    | Mfr. No.        | Description                  | Qty. |
|-------------|-----------------|------------------------------|------|
| HF-5015WSEC | HF-5017W-SEC-PA | 4.9 cu. ft. freezer w/ lock  | 1/ea |
| HF-5020W    | HF-5017W-PA     | 4.9 cu. ft. freezer w/o lock | 1/ea |

### 5.4 cu. ft. Undercounter Freezer (Manual Defrost)

PANASONIC - This compact undercounter freezer features a microprocessor controller with digital display to regulate temperature. An alarm notifies you if the temperature deviates more than 3°C from the setpoint. A door ajar alarm features a delay timer to help eliminate nuisance alarms and the chamber enables the unit to restore temperature uniformity after door openings. The unit also includes remote alarm contacts to allow connection to a centralized alarm monitoring system. There are two fixed shelves and a keyed door lock.



SF-L6111W model shown

#### Specifications:

Temperature range. .... -15°C to -25°C  
Dimensions (H x W x D). .... 34.5 x 23.6 x 25.2 in. (including handle)  
Power requirements ..... 115V, 60 Hz, 0.9A

| Cat. No.  | Mfr. No.     | Description         | Qty. |
|-----------|--------------|---------------------|------|
| SF-L6111W | SF-L6111W-PA | 5.4 cu. ft. freezer | 1/ea |

## Freezers: Explosion-Proof/Flammable Material



### Thermo Scientific Explosion-Proof Freezers

THERMO SCIENTIFIC - These explosion-proof freezers are engineered to prevent triggering an explosion inside or outside the unit.

Thermostat and compressor components are isolated within a vapor-proof enclosure. Electrical connections are hardwired to help prevent sparking and accidental disconnection.

Hydraulic thermostat. Manual defrost. Magnetic vinyl gaskets for positive door seal. CFC-free insulation and refrigerant.

Suitable for use in Class I, Division I Group C and D hazardous environments.



### Thermo Scientific Flammable Material Freezers

THERMO SCIENTIFIC - These flammable storage freezers are designed to be used for storage of volatiles where a spark-free internal cabinet environment is required. All units are manual defrost with CFC- and HCFC-free refrigerants and insulation.

| Cat. No.  | Mfr. No. | Description                                | Qty. |
|-----------|----------|--|------|
| 3552-10AA | 3552-10A | 20.6 cu. ft. freezer, 115V, -12°C to -20°C | 1/ea |

| Cat. No. | Mfr. No. | Description                                | Qty. |
|----------|----------|--|------|
| 3552AA   | 3552A    | 20.6 cu. ft. freezer, 115V, -12°C to -20°C | 1/ea |

## Freezers: Ultra-Low Temperature

### Thermo Scientific Revco® CxF Series -86°C and -40°C Ultra-Low Temperature Chest Freezers

THERMO SCIENTIFIC - Revco® CxF Series chest freezers provide versatile and reliable sample storage.

These chest freezers deliver all the sample protection features of the ExF and DxF freezers in four convenient sizes and are available with a full range of racking solutions for maximum sample storage.

- Eye-level, easy-to-use microprocessor control panel
- Message center: 12-character alphanumeric LED displays setpoints, system status and alarm messages
- Access code to ensure setpoint security
- Heavy gauge, cold-rolled steel exterior construction with a powder-coat paint finish that resists chipping and rust and ergonomic, lockable door handle
- 5 in. (127mm) foamed-in-place, polyurethane insulation



- Optional built-in chart recorder or data logger for continuous monitoring
- Stainless steel interior
- Easy-to-remove air filter
- Inner sub-lids protect bulk samples from ambient exposure during single sample retrievals
- Optional CO<sub>2</sub> or LN<sub>2</sub> safety back-up system for additional protection in the event of a power or mechanical failure
- RS-232 and 4-20 milliamp analog outputs for independent monitoring devices and recorders

| Cat. No.          | Mfr. No.     | Description               | Qty. |
|-------------------|--------------|---------------------------|------|
| <b>ULT390-10A</b> | ULT390-10-A  | 3 cu. ft., 115V, -86°C    | 1/ea |
| <b>ULT139010A</b> | ULT1390-10-A | 12.7 cu. ft., 115V, -86°C | 1/ea |
| <b>ULT139010D</b> | ULT1390-10-D | 12.7 cu. ft., 230V, -86°C | 1/ea |
| <b>ULT179010A</b> | ULT1790-10-A | 17 cu. ft., 115V, -86°C   | 1/ea |
| <b>ULT209010A</b> | ULT2090-10-A | 20 cu. ft., 115V, -86°C   | 1/ea |
| <b>ULT350-10A</b> | ULT350-10-A  | 3 cu. ft., 115V, -40°C    | 1/ea |
| <b>ULT135010A</b> | ULT1350-10-A | 12.7 cu. ft., 115V, -40°C | 1/ea |
| <b>ULT135010D</b> | ULT1350-10-D | 12.7 cu. ft., 230V, -40°C | 1/ea |
| <b>ULT175010A</b> | ULT1750-10-A | 17 cu. ft., 115V, -40°C   | 1/ea |
| <b>ULT205010A</b> | ULT2050-10-A | 20 cu. ft., 115V, -40°C   | 1/ea |

### Thermo Scientific Revco® DxF Series -40°C Upright Freezers

THERMO SCIENTIFIC - Revco® DxF Series upright freezers are designed for daily sample protection and dependability for applications requiring -10°C to -40°C.

- Easy-to-use, knee-level microprocessor control
- Five interior compartment doors
- Galvaneel interior in three sizes (13, 17.3 and 23 cu. ft.)
- Heavy-gauge, cold-rolled steel exterior construction
- 5 in. foamed-in-place, polyurethane insulation
- Optional, built-in chart recorder
- Sturdy, solid, stainless steel shelving
- Vacuum relief port
- Power management system with low voltage surge protection and buck/boost



### Thermo Scientific Revco® ExF Series -86°C Upright Freezers

THERMO SCIENTIFIC - Revco® ExF Series upright freezers are designed for daily sample protection and dependability for applications requiring -50°C to -86°C.

- Easy-to-use, eye-level microprocessor control
- Five interior compartment doors
- Stainless steel interior in four sizes (13, 17.3, 23 and 28 cu. ft.)
- Heavy-gauge, cold-rolled steel exterior construction
- 5 in. foamed-in-place, polyurethane insulation
- Optional, built-in chart recorder
- Sturdy, solid, stainless steel shelving
- Vacuum relief port
- Power management system with low voltage surge protection and buck/boost



| Cat. No.         | Mfr. No.  | Description                       | Qty. |
|------------------|-----------|-----------------------------------|------|
| <b>DxF24040A</b> | DxF24040A | 13 cu. ft. - 115V (240 box)       | 1/ea |
| <b>DxF24040D</b> | DxF24040D | 13 cu. ft. - 208-230V (240 box)   | 1/ea |
| <b>DxF32040A</b> | DxF32040A | 17.3 cu. ft. - 115V (320 box)     | 1/ea |
| <b>DxF32040D</b> | DxF32040D | 17.3 cu. ft. - 208-230V (320 box) | 1/ea |
| <b>DxF40040A</b> | DxF40040A | 23 cu. ft. - 115V (400 box)       | 1/ea |
| <b>DxF40040D</b> | DxF40040D | 23 cu. ft. - 208-230V (400 box)   | 1/ea |

| Cat. No.         | Mfr. No.  | Description                       | Qty. |
|------------------|-----------|-----------------------------------|------|
| <b>ExF24086A</b> | ExF24086A | 13 cu. ft. - 115V (240 box)       | 1/ea |
| <b>ExF24086D</b> | ExF24086D | 13 cu. ft. - 208-230V (240 box)   | 1/ea |
| <b>ExF32086A</b> | ExF32086A | 17.3 cu. ft. - 115V (320 box)     | 1/ea |
| <b>ExF32086D</b> | ExF32086D | 17.3 cu. ft. - 208-230V (320 box) | 1/ea |
| <b>ExF40086A</b> | ExF40086A | 23 cu. ft. - 115V (400 box)       | 1/ea |
| <b>ExF40086D</b> | ExF40086D | 23 cu. ft. - 208-230V (400 box)   | 1/ea |
| <b>ExF60086D</b> | ExF60086D | 28 cu. ft. - 208-230V (600 box)   | 1/ea |

# Cold Storage

## Freezers: Ultra-Low Temperature



### Thermo Scientific Revco® UxF Series -86°C Upright Freezers

THERMO SCIENTIFIC - Revco® UxF Series upright freezers are built specifically to protect the most critical samples, achieving outstanding thermal performance, safety and security through state-of-the-art engineering.

- Performance - Revco® UxF Series feature an outstanding BTU (British thermal unit) reserve, leading to fast door opening recovery times so sample integrity isn't compromised.
- Safety and security - The highlight of the new Revco® UxF Series is an innovative, touch-screen control panel. Here you can control all freezer settings and user authority levels, as well as monitor the freezer's health 24/7 and access a detailed event log. You can download a report of the event log to a portable drive via a built-in USB port.
- Sample storage capacity - Revco® UxF Series freezers maximize sample storage capacity while minimizing the freezer's physical space inside your laboratory. Choose from five new capacities, storing up to 700 - 2 in. boxes or 525 - 3 in. boxes inside a single freezer.
- Energy-savings - Save up to 15% in energy usage\* with the Revco® UxF Series' energy-savings mode. Or, choose high-performance mode for applications requiring ultra-tight temperature uniformity—all through an easy-to-use, touch screen interface.

\*Compared to energy-savings model

| Cat. No.  | Mfr. No.  | Description                       | Qty. |
|-----------|-----------|-----------------------------------|------|
| UxF30086A | UxF30086A | 14.9 cu. ft. - 115V (300 box)     | 1/ea |
| UxF30086D | UxF30086D | 14.9 cu. ft. - 208-230V (300 box) | 1/ea |
| UxF40086A | UxF40086A | 19.4 cu. ft. - 115V (400 box)     | 1/ea |
| UxF40086D | UxF40086D | 19.4 cu. ft. - 208-230V (400 box) | 1/ea |
| UxF50086A | UxF50086A | 24.1 cu. ft. - 115V (500 box)     | 1/ea |
| UxF50086D | UxF50086D | 24.1 cu. ft. - 208-230V (500 box) | 1/ea |
| UxF60086A | UxF60086A | 28.8 cu. ft. - 115V (600 box)     | 1/ea |
| UxF60086D | UxF60086D | 28.8 cu. ft. - 208-230V (600 box) | 1/ea |
| UxF70086A | UxF70086A | 33.5 cu. ft. - 115V (700 box)     | 1/ea |
| UxF70086D | UxF70086D | 33.5 cu. ft. - 208-230V (700 box) | 1/ea |

### Thermo Scientific Revco® -80°C Benchtop Freezer

THERMO SCIENTIFIC - The Revco® -80°C Benchtop Freezer is ideal for personal or clinical trial applications. This benchtop freezer offers a full 1 cu. ft. (28L) capacity, and help ensure the protection of your valuable samples.

- Air-cooled refrigeration systems are engineered to maintain design temperatures in warm 32°C (90°F) ambient conditions (factory setpoint -30°C)
- Solid-state control system with adjustable temperature setpoint
- Digital temperature display resolution to 1°C
- Compact 25.2 x 30.7 in. (640 x 781mm) footprint
- Industrial-grade, hermetically sealed refrigeration compressors
- All-steel cabinet with high-impact epoxy finish for easy cleaning
- 4 in. (102mm) foamed-in-place, CFC-free urethane insulation to protect product against high ambient conditions
- Heavy-duty counterbalanced lid with key lock
- Thermal interior sublid
- Digital temperature display resolution to 1°C
- Push button setpoint display
- Key operated main power switch
- Integrated preset overtemperature safety alarm with battery back-up and audible warning of temperature deviation
- Exterior alarm contacts for connection to remote monitoring system

| Cat. No.   | Mfr. No.   | Description      | Qty. |
|------------|------------|------------------|------|
| R3928-185A | ULT185-5-A | Benchtop freezer | 1/ea |

### Low-Temperature Undercounter Freezers

NOR-LAKE SCIENTIFIC - This compact freezer has a heavy-duty refrigeration system and industrial-quality cabinet with one gray epoxy-coated shelf. The exterior is white enamel, the back and bottom are galvanized steel and the interior liner and door panel are aluminum. The unit features a digital LED display microprocessor temperature controller, warm and cold audible and visual alarm and remote alarm contacts. The base-mount, non-CFC refrigeration system has an air-cooled condensing unit, automatic defrost, four 4 in. legs, magnetic gasket and door lock. The complete cabinet and door are foamed-in-place with high-density polyurethane foam insulation. Operating temperature is -30°C. UL/CUL listed. Warranties: 18-month parts and labor, 5-year compressor (US and Canada). The freezers have several available options, including casters instead of legs, stainless steel interior and exterior and digital thermometer alarm.



#### Specifications:

- Shelf area ..... 2.7 sq. ft.  
Temperature range ..... -30°C to -25°C  
Power requirements ..... 115V, 60 Hz

#### Dimensions (H x W x D)

- Interior ..... 22⅞ x 23 x 19½ in.  
Exterior ..... 34 x 27 x 25 in

| Cat. No.  | Mfr. No.     | Description         | Qty. |
|-----------|--------------|---------------------|------|
| XF051WMW0 | NSXF051WMW/0 | 5.0 cu. ft. freezer | 1/ea |

## Freezers: Ultra-Low Temperature

### -86° Select™ Ultra-Low Upright Freezers

NOR-LAKE SCIENTIFIC - Designed to meet the demanding requirements for scientific and laboratory research. Advanced engineered design incorporates the latest in cabinet, refrigeration, temperature control and monitoring features. Provides energy efficient, convenient, safe and reliable performance for optimal storage temperature environments necessary for a wide range of life science, pharmacy, biological, medical, clinical, and industrial applications.



- Advanced PLC (programmable logic) microprocessor controller, door mounted eye level display and interface
- Password protection—2 levels set points and parameters, security for power, temperature and alarm settings; incoming voltage monitoring and digital display
- Power failure alarm (audible and visual), audible and visual high/low temperature alarms, user settable via controller keypad remote alarm contacts located on back of cabinet for easy installation and access

These freezers feature a super capacity (tri-tube) capillary tube system, an evaporator design enhances refrigerant flow increasing the overall efficiency, temperature uniformity and recovery performance and an air cooled condenser, high capacity with large surface area. CFC free, commercially available refrigerants are used: R404a in first stage and R508b in second stage.

There is a CFC free polyurethane foam insulation cabinet and door and it is painted with a high impact, smooth scratch and corrosion resistant white paint. Five internal storage compartments with four heavy duty reinforced stainless steel shelves. Shelves are adjustable in 1 in. increments.

Compatible with optional stainless steel storage racks, fiberboard boxes and dividers for multiple storage needs—ask your sales or customer service representative for details.

#### Specifications:

Temperature range ..... -50°C to -86°C

#### NSSUF191W0 and NSSUF191W4

Dimensions (W x D x H) ..... Interior 25.2 x 24.3 x 53 in.  
Exterior 36.5 x 36.1 x 77.8 in.

#### NSSUF241W0 and NSSUF241W4

Dimensions (W x D x H) ..... Interior 31.1 x 24.3 x 53 in.  
Exterior 42.3 x 36.1 x 77.8 in.

#### NSSUF281W0 and NSSUF281W4

Dimensions (W x D x H) ..... Interior 36.8 x 24.3 x 53 in.  
Exterior 48.2 x 36.1 x 77.8 in.

| Cat. No.          | Mfr. No.      | Description                           | Qty. |
|-------------------|---------------|---------------------------------------|------|
| <b>NSSUF191W0</b> | NSSUF191WWW/0 | 18.9 ft <sup>3</sup> - 120V 60Hz      | 1/ea |
| <b>NSSUF191W4</b> | NSSUF191WWW/4 | 18.9 ft <sup>3</sup> - 208/230V, 60Hz | 1/ea |
| <b>NSSUF241W0</b> | NSSUF241WWW/0 | 23.2 ft <sup>3</sup> - 120V 60Hz      | 1/ea |
| <b>NSSUF241W4</b> | NSSUF241WWW/4 | 23.2 ft <sup>3</sup> - 208/230V, 60Hz | 1/ea |
| <b>NSSUF281W0</b> | NSSUF281WWW/0 | 27.5 ft <sup>3</sup> - 120V 60Hz      | 1/ea |
| <b>NSSUF281W4</b> | NSSUF281WWW/4 | 27.5 ft <sup>3</sup> - 208/230V, 60Hz | 1/ea |

### Space-Saving -86°C Ultra-Low Temperature Freezers

PANASONIC - Panasonic conventionally insulated PRO Series™ ultra-low freezers provide energy savings while minimizing carbon footprint throughout the laboratory without compromising performance. The conventionally insulated series also maintains internal temperatures as low as -86°C. All models use Panasonic-designed compressors for ultra-low temperature applications. Manufactured with foam-in-place insulation to maximize interior temperature uniformity, they are ideally suited for use in hospitals and laboratories for long-term preservation and storage of blood, specimens and components, as well as material testing.



#### Specifications:

Temperature control ..... -50°C to -86°C  
Power requirements ..... 208/230V, NEMA 6-15

#### MDFU5486S

Interior dimensions (W x D x H) ..... 24.8 x 23.6 x 50.4 in.  
Exterior dimensions (W x D x H) ..... 35 x 34.4 x 78.3 in.

#### MDFU7486S

Interior dimensions (W x D x H) ..... 34.2 x 23.6 x 50.4 in.  
Exterior dimensions (W x D x H) ..... 44.5 x 34.4 x 78.3 in.

| Cat. No.         | Mfr. No.    | Description  | Qty. |
|------------------|-------------|--------------|------|
| <b>MDFU5486S</b> | MDF-U5486SC | 17.1 cu. ft. | 1/ea |
| <b>MDFU7486S</b> | MDF-U7486SC | 23.5 cu. ft. | 1/ea |

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# Cold Storage

## Freezers: Ultra-Low Temperature

### Twin Guard® Series -86°C Ultra-Low Freezers

PANASONIC - The Twin Guard® Series Ultra-low freezers include integrated LCD performance monitor and digital controller for comprehensive system management, data logging, remote communications, alarms, predictive performance and validation. Maintenance free, filterless design.

The Panasonic Twin Guard® Series satisfies an industry demand for safe, long-term storage for the most high-valued materials. Two, independent refrigeration systems, combined with optional liquid nitrogen or liquid CO<sub>2</sub> back-up systems, offer a circle of protection unmatched in the marketplace. Developed for use with conventional inventory racks and boxes, the Twin Guard® Series is ideal for storage of sensitive stem cells, embryos, cell lines, and other rare specimens.

The Twin Guard® Series Ultra-Low Freezer avoids conventional cascade refrigeration technology by using two completely independent one-compressor, autocascade cooling systems, each capable of maintaining ultra-low temperatures.

- Each refrigeration circuit includes a closed-loop cold-wall evaporator configured in parallel to the other
- Independent evaporators and cooling fans assure back-up status at all times, eliminating system failure due to sub-component failure in conventional cascade systems configured of mutually dependent high- and low-stage systems



MDFU700VXC model shown

- In the unlikely event of a compressor failure in one system, the remaining system will automatically maintain a minimum of -65°C for an indefinite period
- A unique EcoMode deploys both systems in overlapping cycles to maintain -86°C and to reduce energy consumption by as much as 15%
- Evaporator coils embedded in the patented, high-tech, Panasonic VIP® PLUS vacuum-insulated thin-wall cabinet are strategically oriented to deliver the best temperature uniformity at all shelf levels, top-to-bottom and front-to-back
- New Panasonic designed Cool Safe refrigeration compressors feature innovative refrigerant feedback processes to reduce compressor temperature, thereby extending compressor life and minimizing heat output
- In the event of a facility power failure with optional CO<sub>2</sub> or LN<sub>2</sub> backup system installed, the freezer will maintain -65°C storage temperature for up to 8 hours

#### Specifications:

Temperature control ..... -50°C to -86°C  
Power requirement ..... 208/230V NEMA 6-15

#### MDFU500VXC

Dimensions (W x D x H) ..... Interior 25.6 x 23.6 x 54.3 in.  
Exterior 33.5 x 40.2 x 78.3 in.

#### MDFU700VXC

Dimensions (W x D x H) ..... Interior 34.3 x 23.6 x 55.1 in.  
Exterior 39.8 x 34.3 x 79.1 in.

| Cat. No.          | Mfr. No.       | Description  | Qty. |
|-------------------|----------------|--------------|------|
| <b>MDFU500VXC</b> | MDF-U500VXC-PA | 18.3 cu. ft. | 1/ea |
| <b>MDFU700VXC</b> | MDF-U700VXC-PA | 25.7 cu. ft. | 1/ea |

### Ultra-Low Temperature Chest Freezers

PANASONIC - These ultra-low temperature freezers maintain internal temperatures as low as -86°C (-123°F) at an ambient temperature of +30°C (86°F). They are ideally suited for use in hospitals and laboratories, in long-term preservation and storage of blood, specimens and components and in testing of various types.

- Microprocessor temperature control system with digital temperature display
- Platinum resistance sensor in the temperature control for extra precision and reliability
- Power failure warning system with built-in audible and visual indicators
- Double-insulation polyurethane walls
- Easy-open/easy-close hinged doors
- AT models also offer an automatic temperature recording mechanism and CO<sub>2</sub> back-up system

#### Specifications:

Temperature control ..... -20°C to -95°C (1°C increment)  
Power requirements ..... 220V, 60 Hz, built-in voltage booster



**MDF-594C**

Dimensions (W x D x H) ..... Interior 50.3 x 19.7 x 30 in.  
Exterior 79.1 x 30.3 x 42.1 in.

#### **MDF-794C**

Dimensions (W x D x H) ..... Interior 72.4 x 19.7 x 30 in.  
Exterior 101.2 x 30.3 x 42.1 in.

| Cat. No.        | Mfr. No. | Description          | Qty. |
|-----------------|----------|----------------------|------|
| <b>MDF-594C</b> | MDF-594C | 17.1 cu. ft. freezer | 1/ea |
| <b>MDF-794C</b> | MDF-794C | 24.7 cu. ft. freezer | 1/ea |

## Freezers: Ultra-Low Temperature

### -80°C Ultra-Low Temperature VIP® PLUS Freezer

PANASONIC - The MDF-C8V's ideal -80°C freezing environment using VIP® PLUS insulation technology maximizes storage capacity. The newly developed single-compressor system achieves higher energy efficiency and space-saving construction. Designed to achieve 40% higher energy conservation than conventionally insulated models.

Panasonic's most advanced insulation system VIP® PLUS enables reduced thickness of insulation to approximately one half compared to conventional systems. Patented vacuum insulation cabinet construction reduces wall thickness and achieves greater storage capacity. Use of VIP® PLUS insulation material on the front, left and right sides enables a smaller installation space with exceptional storage capacity to footprint ratio. New refrigeration circuit without filter makes the inconvenient customer maintenance procedure of filter cleaning unnecessary.

#### Specifications:

Temperature range ..... -60°C to -80°C (-1°C increments)  
 Interior dimensions (W x D x H) ..... 15.9 x 19.3 x 16.9 in.  
 Exterior dimensions (W x D x H) ..... 21.6 x 27 x 37.2 in.  
 Power requirements ..... 115V, 60 Hz



### VIP® Series -86°C Ultra-Low Temperature Freezers

PANASONIC - The Panasonic MDF-Series -86°C ultra-low freezers feature refrigeration systems designed to deliver energy-saving, high-performance cooling. Designed for long-term preservation of biologicals, the VIP® Series offers maximum storage volume in the smallest possible footprint. Shelves are configurable for use with racks.

Panasonic VIP® ultra-low freezers represent a complete combination of refrigeration, control, alarm, monitoring and accessibility for product safety at -86°C. Ideal for material storage in repositories, hospitals, clinics and medical research facilities, the VIP® Series is designed to significantly reduce energy consumption.

The Panasonic microprocessor control system is secure, easy-to-use and comprehensive. Setpoint, alarm parameters and self-diagnostic functions are accessed through a tamper-resistant keypad protocol. Control inputs are managed with convenient push-ad buttons on a unitized, sealed control overlay. The panel is door-mounted and angled for easy access.

The environmentally friendly refrigeration system is intelligently managed by intuitive microprocessor controls and integrated into Panasonic's patented VIP® vacuum panel cabinet makes the most efficient use of available floor space.

#### Specifications:

Temperature control ..... -50°C to -86°C (+30°C ambient)

#### MDF-U32VT1

Interior dimensions (W x D x H) ..... 19.3 x 23.6 x 44.9 in.  
 Exterior dimensions (W x D x H) ..... 26.4 x 34.1 x 73.2 in.

#### MDF-U53VA and MDF-U56VC

Interior dimensions (W x D x H) ..... 24.8 x 23.6 x 54.3 in.  
 Exterior dimensions (W x D x H) ..... 30.3 x 34.4 x 78.3 in.

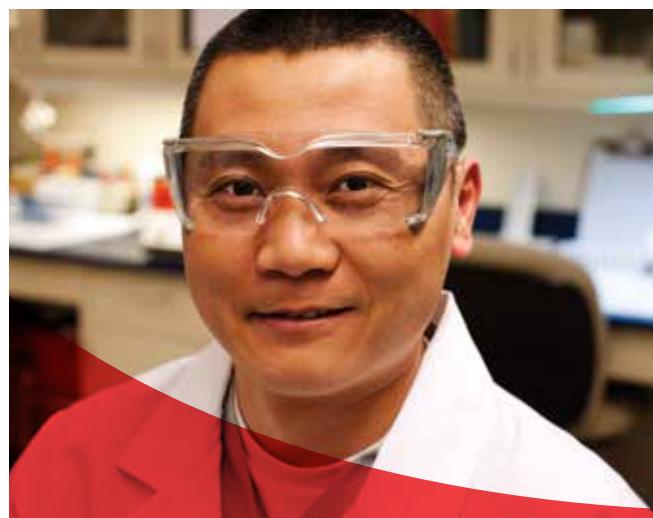
#### MDFU76VAPA and MDF-U76VC

Interior (W x D x H) ..... 34.2 x 23.6 x 55.1 in.  
 Exterior (W x D x H) ..... 39.8 x 34.4 x 78.3 in.



*MDF-U76VC model shown*

| Cat. No.       | Mfr. No. | Description       | Qty. |
|----------------|----------|-------------------|------|
| <b>MDF-C8V</b> | MDF-C8V1 | 3 cu. ft. freezer | 1/ea |



**Equipped  
to make a difference.**

# Cold Storage

## Freezers: Ultra-Low Temperature



### Stirling Ultracold Undercounter/Benchtop/ Stackable Ultra-Low Freezer

STIRLING ULTRACOLD - This ultra-low freezer offers a spacious 3.7 cu. ft. (105L) cabinet that delivers stable, uniform storage over a range of -20°C to -86°C at a fraction of the operating cost of conventional cascade refrigeration systems.

It combines the performance of a unique free-piston Stirling engine with an efficient, thin-wall, non-CFC urethane foam and vacuum-insulated cabinet. This permits high-performance ultra-low storage capacity in an undercounter, benchtop or stacked cabinet configuration.

The ultra-low freezer operates on standard 115V, 60Hz AC. Engine power demand is typically 150W, nominal. The Humm™ self-modulating cooling system demands only 230W at ambient start-up and decreases for most efficiency when setpoint is reached.

The Stirling Swift™ integral control and alarm system includes an intuitive graphic user interface to display operating temperature, reserve cooling capacity, status functions and performance metrics for field troubleshooting. Secure touchpad inputs permit secure programming for all control setpoints. An optional communications system interface permits remote viewing of freezer performance.

| Cat. No. | Mfr. No. | Description         | Qty. |
|----------|----------|---------------------|------|
| SU105    | SU105    | 3.7 cu. ft. freezer | 1/ea |



### Stirling Shuttle™ Portable Ultra-Low Freezer

STIRLING ULTRACOLD - The Stirling Shuttle™ is a portable ultra-low freezer developed for personal or mobile applications without the need for dry ice. It offers reliable, energy-efficient storage for cold-chain management, short-term or long-term ultra-low storage and secure mobile transport of high-value vaccines or biological specimens. It is ideal for use within biorepositories, in medical/surgical suites, pathology laboratories, tissue banks, regenerative medicine and in other applications associated with clinical or diagnostic medicine, medical research and pharmaceutical distribution.

The Shuttle™ creates -86°C deep cold temperatures enabled through Humm™, a proprietary free-piston Stirling engine technology without conventional refrigeration, Peltier or cascade compressor systems.

Lightweight and easily transported, it operates on both AC and DC power at both 60Hz and 50Hz electrical service. It can be placed on a desktop, lab bench or cart in laboratories or operating rooms, and is easily transferred to vehicles, aircraft, remote and disaster locations. It can operate from a standard car or truck battery and through a vehicle DC power adapter supplied standard with the unit.

| Cat. No. | Mfr. No. | Description                  | Qty. |
|----------|----------|------------------------------|------|
| ULT-25   | ULT-25   | 0.9 cu. ft. portable freezer | 1/ea |

## Pricing

Please call your sales or customer service representative to check up-to-the-minute pricing and availability.

# Constant Temperature

## Hot Plates

### Thermo Scientific Cimarec® Digital Hot Plates

THERMO SCIENTIFIC - These hot plates feature a Cimarec® seamless, reflective white ceramic top that helps to increase sample visibility, is easy to clean and is resistant to acids and alkalies. An easy-to-read LED display shows temperature settings, which are adjustable in 5° increments. The sturdy, low-profile units are ideal for labs that perform repetitive processes. The units' microprocessor-controlled feedback technology maintains consistent, repeatable temperature settings. The flat top and high-wattage heating elements provide superior heating transfer and fast boil time. To help prevent accidental burns, hot plates include a hot-surface safety alert system that signals when the heating surface is too hot to touch (>50°C).

Available in two sizes. All hot plates are supplied with a detachable cord and an integral ring stand holder that accommodates a ½ in. diameter support rod.

| Cat. No. | Mfr. No. | Description                          | Qty. |
|----------|----------|--------------------------------------|------|
| H2179-6  | HP130915 | 4 x 4 in. - temp. range 5°C to 540°C | 1/ea |
| H2179-7  | HP131225 | 7 x 7 in. - temp. range 5°C to 540°C | 1/ea |



### Thermo Scientific Cimarec® Digital Stirring Hot Plates

THERMO SCIENTIFIC - These hot plates feature a Cimarec® seamless, reflective white ceramic top that helps to increase sample visibility, is easy to clean and is resistant to acids and alkalies. An easy-to-read LED display shows temperature settings, which are adjustable in 5° increments. The sturdy, low-profile units are useful in labs that perform repetitive processes. The microprocessor-controlled feedback technology maintains consistent, repeatable temperature settings. The hot plates include high-wattage heating elements and a flat top that allow for superior heating transfer and fast time to boil. To prevent accidental burns, hot plates include a hot-surface safety alert system that signals in red when the heating surface is too hot to touch (>50°C).

Hot plates have an adjustable speed range from 60 to 1,200 rpm and feature StirTrac™ technology, which enables improved slow-speed stirring, stronger magnetic coupling and consistent speed control. The technology also utilizes a braking feature that immediately stops the stir bar for quick flask removal. All hot plates include a detachable cord.

| Cat. No. | Mfr. No.  | Description                                    | Qty. |
|----------|-----------|--|------|
| H2179-9  | SP131015Q | 4 x 4 in. top plate - temp. range 5°C to 540°C | 1/ea |



### Thermo Scientific Micro Hot Plate

THERMO SCIENTIFIC - Use this compact hot plate where single or multiple heat source is required. Ideal for volumes under 500mL. Hot plate provides stepless temperature control from 38°C to 371°C ±5°. Nickel-chromium element is embedded in refractory plate. Case is perforated for heat dissipation. Complete with three-conductor appliance cord with three-prong plug. Dimensions (H x D): 3¾ x 3½ in., top plate 3¾ in. dia. Operates on 120V, 50/60 Hz, 2.7A, 325W at 371°C. UL listed.



| Cat. No. | Mfr. No. | Description     | Qty. |
|----------|----------|-----------------|------|
| H2155    | HP2305B  | Micro hot plate | 1/ea |

### Thermo Scientific Super-Nuova™ Stirring Hot Plates

THERMO SCIENTIFIC - Ideal for cold room applications, these stirring hot plates are designed to provide control of temperatures below 100°C. Plates feature user-programmable preset buttons that allow up to four commonly used temperatures to be recalled, making them useful for labs that perform repetitive procedures. Safety features include a hot-top surface alert, a walk-away timer that shuts off heating after a user-defined time period and an adjustable over-temperature protection circuit. A calibration mode permits a remote probe to be calibrated to external standards, and microprocessor-controlled feedback technology provides consistent, repeatable temperature settings. Stirring hot plates have an operating temperature range of 1°C to 370°C.



The units' seamless, reflective white ceramic top increases sample visibility and allows for easy cleaning. A low-profile cast aluminum body increases stability and durability. The 7 x 7 in. hot plates accommodate sample weights up to 25 lbs.

Stirring hot plates feature StirTrac™ technology, which improves slow-speed stirring and speed control and provides stronger magnetic coupling from 50 to 1,200 rpm. Plates include an RS232 port, a 6 in. type K probe, detachable cord and retention bracket.

| Cat. No. | Mfr. No.  | Description                  | Qty. |
|----------|-----------|------------------------------|------|
| H2185-53 | SP131825Q | 7 x 7 in. stirring hot plate | 1/ea |

# Constant Temperature

## Hot Plates/Miscellaneous

### Talboys Advanced Hot Plates

TROEMNER - Talboys Advanced hot plates deliver accurate and repeatable results. Excellent temperature uniformity. These units are microprocessor-controlled and have an LED display for temperature. Control panel features easy-to-use controls that allow users to dial in adjustments. Rear housing features an integral support rod holder with locking knob to accept the optional support rod and clamp kit.



#### Specifications:

Maximum capacity.....600mL (4 x 4 in.), 2,500mL (7 x 7 in.)

#### Temperature range

Ceramic .....Ambient +5°C to 500°C

Aluminum .....Ambient +5°C to 400°C

#### Temperature stability

Ceramic\* .....±3%

Aluminum\* .....±2%

\*Below 100°C ±2°C. Environmental and sample conditions permitting.

| Cat. No.         | Mfr. No.     | Description                  | Qty. |
|------------------|--------------|------------------------------|------|
| <b>TA4AHPUSA</b> | 984TA4AHPUSA | 4 x 4 in. aluminum top plate | 1/ea |
| <b>TA4CHPUSA</b> | 984TA4CHPUSA | 4 x 4 in. ceramic top plate  | 1/ea |
| <b>TA7AHPUSA</b> | 984TA7AHPUSA | 7 x 7 in. aluminum top plate | 1/ea |
| <b>TA7CHPUSA</b> | 984TA7CHPUSA | 7 x 7 in. ceramic top plate  | 1/ea |

### Talboys Basic Hot Plate

TROEMNER - Featuring a powerful heater that reaches 400°C in minutes, this rugged hot plate is ideal for educational labs. A durable cast aluminum top plate provides an even heating surface. The compact design helps save valuable bench space. Hot plates are set with a fixed temperature (thermostatic control preset at 400°C).



### Tropicooler™ Benchtop Freezer

BOEKEL - Use this benchtop freezer for storing frozen restriction enzymes or DNA libraries. It can also be used for warm incubation of microtubes. The freezer has a microprocessor-controlled temperature selection. Peltier effect heat pumps use no compressors or CFCs. Dry heat and cold are excellent alternatives to ice buckets and waterbaths. The incubator is supplied with 2 machined aluminum blocks each with a capacity for 14 x 1.5mL microcentrifuge tubes. The blocks have a self-contained recessed handle for easy transport.



#### Specifications:

Temperature range.....-19°C to 69°C

Performance.....±0.5°C

Power requirement .....115V, 100W

#### Dimensions

Sample well (L x W x H).....3½ x 2¼ x 1½ in. (8.7 x 5.7 x 3.7cm)

Overall (W x D x H) .....9¾ x 11¾ x 7¼ in. (24.8 x 28.6 x 18.4cm)

| Cat. No.        | Mfr. No. | Description      | Qty. |
|-----------------|----------|------------------|------|
| <b>J1667-16</b> | 260014   | Benchtop freezer | 1/ea |

### Dry Baths

AZER SCIENTIFIC - These digital dry baths offer digital control over both temperature and time, eliminating the need for an external thermometer or timer. Available in two configurations, the digital dry baths offer capacity for up to two blocks making them extremely space efficient. Each dry bath comes complete with a built-in user recalibration function to guarantee long-term temperature accuracy. Each dry bath includes an easy-to-use block lifter with a temperature-insulated handle for quick, convenient exchange of blocks, even while they're still hot.



The cavities of the high-grade aluminum blocks are precision machined to match the conical size and shape of 0.5, 1.5, 2.0, 15 and 50mL tube sizes, providing unsurpassed temperature uniformity.

#### Specifications:

Chamber .....Fast-heating aluminum

Timer .....1 to 999 minutes

Electrical .....115V~, 60 Hz

#### Temperature

Accuracy.....+/- 0.2°C

Increments .....0.1°C

Operating .....+4°C to +65°C

Range .....Ambient +5° to 150°C

Resolution .....0.1°C

Uniformity.....+/- 0.2°C

#### Dimensions

Single position .....7.8 x 9 x 3.2 in. (20 x 23 x 8cm)

Two position .....8.7 x 10.3 x 3.2 in. (22 x 26 x 8cm)

Block dimension .....3 x 3.75 x 2 in. (7.6 x 9.5 x 5cm)

| Cat. No.      | Mfr. No. | Description          | Qty. |
|---------------|----------|----------------------|------|
| <b>ES3363</b> | ES3363   | 1-block dry bath     | 1/ea |
| <b>ES3364</b> | ES3364   | 2-block dry bath     | 1/ea |
| <b>ES3387</b> | ES3387   | 20 x 13mm test tubes | 1/ea |

# Constant Temperature

## Ovens



### Thermo Scientific Precision® Compact Gravity Convection Ovens

THERMO SCIENTIFIC - Precision® compact heating and drying ovens conserve valuable benchtop space. Double-wall interior with 2.5cm (1 in.) silica-based insulation and powder-coated cold-rolled steel exterior. Pilot light visually indicates oven operation status.

Feature mechanical or gravity convection models that provide the ideal choice for any application. 48L (1.7 cu. ft.) capacity.

#### Gravity convection models

- Gentle drying with low turbulence: air is moved vertically through chamber to heat samples
- Preset high-temperature safety bimetallic thermostat ensures overtemperature protection
- Interior (D x W x H): 11.5 x 16 x 16.2 in.
- Exterior (L x W x H): 13.5 x 18.5 x 22.5 in.

#### Mechanical convection models

- Uniform heating, precise temperature control and fast drying
- Hydraulic thermostat and LED display
- Stainless-steel chamber
- Interior (D x W x H): 11.5 x 16 x 16 in.
- Exterior (L x W x H): 18.4 x 25 x 15.6 in.

| Cat. No.        | Mfr. No.  | Description                | Qty. |
|-----------------|-----------|----------------------------|------|
| <b>N8222-25</b> | PR305225G | Gravity convection oven    | 1/ea |
| <b>N8222-27</b> | PR305225M | Mechanical convection oven | 1/ea |



### Gravity Convection Ovens

BOEKEL - These durable yet lightweight reach-in ovens are suited for bacteriological, clinical, educational and industrial laboratory needs. The exterior is constructed of steel and finished in gray baked enamel. The inside chamber is aluminum and is insulated from the outer chamber with glass wool insulation.

These units are designed for continuous temperature uniformity, with natural air convection that allows them to reach the maximum temperature within ½ hr. of the start-up time. All models are equipped with intake/exhaust vents, a cool handle, a neon pilot light and an on/off switch. All ovens utilize bimetallic thermostats and reach a maximum temperature of 225°C in 30 min. Ovens include 2 removable zinc-plated steel shelves, a thermometer with holder and a 6 ft. cord with grounded plug. Ovens operate on 115V. Do not use ovens with combustible materials.

#### Specifications:

Temperature range.....100°C to 225°C

Temperature control .....±1.0°C

#### Dimensions (W x D x H)

##### N8412-1

Chamber .....14 x 15 x 14 in.

Exterior.....16½ x 19 x 21¼ in.

##### N8414-1

Chamber .....17 x 15 x 18½ in.

Exterior.....19½ x 18¾ x 25¼ in.

| Cat. No.       | Mfr. No. | Description                           | Qty. |
|----------------|----------|---------------------------------------|------|
| <b>N8412-1</b> | 107905   | 1.6 cu. ft. - 115V, 1,200W power req. | 1/ea |
| <b>N8414-1</b> | 107801   | 2.7 cu. ft. - 115V, 1,500W power req. | 1/ea |

# Constant Temperature

## Plasma Thawers



### Plasma Thawing Bath

**CARDINAL HEALTH** - This plasma thawer is designed for use in blood banks and laboratories where it is required to thaw up to four units of Fresh Frozen Plasma (FFP) or Cryoprecipitated AHF or Plasma Frozen within 24 hours after Phlebotomy (PF24) for future infusion into a patient. It offers both controlled temperature and agitation to thaw various volumes of plasma via two independently controlled baskets that accommodate up to two plasma bags per basket. The digital microprocessor control offers rapid temperature recovery and optimal temperature stability to reduce the time required to thaw multiple bags. The easy-to-program user interface allows multiple time options for thawing various-sized bags. Upon completion of a timed cycle, the baskets will automatically raise from the bath. Advanced safety features will notify the user of unsafe conditions and raise the baskets upon alarm activation. Designed to meet FDA standards for safety and performance in plasma thawing. Certified to applicable UL and CSA standards – 60601-1 & 61010-1. Disposable overwrap protection bags (available separately) provide security and protection from contamination.

#### Specifications:

Thawing capacity ..... 4 bags  
Baskets ..... 2 stainless steel  
Electrical ..... 120V, 50/60Hz 7A, 900W

#### Chamber

Drain time ..... Approx. 5 min.  
Material ..... Stainless steel  
Volume ..... 17.98L (4.75 gal.)

#### Temperature

Accuracy ..... +/- 0.3°C  
Setpoint ..... 36.0°C

#### Dimensions (W x L x H)

Exterior ..... 18.5 x 16.25 x 14.75 in. (43 x 41.3 x 37.5cm)  
Overall ..... 21.75 x 23 x 15.5 in. (39.4 x 27.9 x 19.1cm)  
Chamber ..... 15.5 x 11 x 7.5 in. (39.4 x 27.9 x 19.1cm)

| Cat. No.           | Description               | Qty.   |
|--------------------|---------------------------|--------|
| CH-PT1000          | Plasma thawing bath       | 1/ea   |
| <b>Accessories</b> |                           |        |
| CH-PTBAG           | Overwrap protection bags  | 250/bx |
| CH-PTCOVR          | Chamber cover             | 1/ea   |
| CH-PTTHR           | Plasma thawer thermometer | 1/ea   |



### SAHARA-III - Dry Tempering System

**SARSTEDT** - SAHARA-III is a dry tempering system that enables blood components such as frozen plasma, cryo preparations, whole blood or erythrocytes to be thawed or warmed prior to transfusion. The tempering process is carried out dry without the use of water. Instead of water, heat is transferred from a temperature-controlled warming plate to the blood components according to the principle of thermal conduction (SAHARA-III basic model) and from highly turbulent, temperature-controlled heated ambient air according to the principle of forced convection (SAHARA-III basic model and SAHARA-III MAXITHERM). The SAHARA-III warming plate can accommodate up to three blood bags, while the SAHARA-III MAXITHERM non-warming double plate can accommodate up to six blood bags.

- Contamination risks by waterborne pathogens associated with water baths are prevented
- Standardized thawing and warming procedure
- Active drying of the bag surface provides hygienic conditions surrounding the blood bag
- Contactless measurement of the blood component temperature by an infrared sensor
- Fast availability of frozen blood components due to ice-free indication
- Gentle agitation to achieve an almost homogeneous temperature profile within the blood bag and to help prevent damage to the blood
- Tempering of different blood components
- No disposables or consumables required for operation

| Cat. No.   | Mfr. No.    | Description          | Qty. |
|------------|-------------|----------------------|------|
| S978710502 | 97.8710.502 | SAHARA-III           | 1/ea |
| S978710802 | 97.8710.802 | SAHARA-III MAXITHERM | 1/ea |

# Constant Temperature

## Water Baths



### Thermo Scientific Lab-Line™ AquaBath™ Water Baths

THERMO SCIENTIFIC - These water baths provide precise temperature control and are available with an analog or digital operating system. Temperature range: ambient to 100°C.

Available in a variety of sizes, including a shallow form to meet specific application needs and budgets. Bath features dual thermostats and an independent high-limit thermostat for overtemperature protection.

- Hinged acrylic cover lifts to a 90° stay-open position or can be removed completely
- "Fins" on the hinged clear acrylic gable cover (included) protect hands from hot vapors. Exterior remains cool to the touch even after extended use to prevent accidental burns
- Temperature-resistant plastic rim fits over the seamless rust-resistant stainless-steel reservoir for a leak-free seal
- Stainless-steel exterior; tough, easy-to-clean enamel coating
- Heating elements will not burn out if the bath accidentally runs dry

#### Digital operating system

- Field-calibratable. Digital temperature set and readout selectable display with 0.1°C resolution
- PID control provides ±0.24°C uniformity, ±0.5°C stability and ±0.1°C control resolution at 37°C

#### Analog operating system

- Easy-to-use analog control and hydraulic thermostat—ideal for fixed setpoint applications. Temperature uniformity ±0.2°C at 37°C
- Diffuser tray, thermometer clip and nonhazardous liquid, partial immersion (76mm) thermometer (-10°C to +110°C) included (230V models do not include a thermometer)

| Cat. No.  | Mfr. No.    | Description                            | Qty. |
|-----------|-------------|--|------|
| 18022A1CE | 18022A-1CEQ | 2L (0.5 gal.) shallow - digital - 230V | 1/ea |
| W2981-13  | 18050AQ     | 2L (0.5 gal.) - analog - 120V          | 1/ea |
| 18000A    | 18000AQ     | 5L (1.3 gal.) analog - 120V            | 1/ea |
| W2981-3   | 18005AQ     | 10L (2.6 gal.) analog - 120V           | 1/ea |
| 18007A    | 18007AQ     | 10L (2.6 gal.) digital - 120V          | 1/ea |



### Thermo Scientific™ Precision™ Circulating Water Bath

THERMO SCIENTIFIC - This circulating bath is ideal for critical research, quality control and legal or referee tests. Temperature sensing is by a platinum probe located in the bath medium, which can be oil or water. The bath features an LED temperature display in 0.1°C increments and a stainless steel impeller that directs circulation flow steadily around the bath perimeter and elevated, diffuser type sample platform. Bolted to the underside of the bath chamber is the heater element for fast heat transfer. Fiberglass insulation around the chamber protects temperature levels from heat loss. Controls turn on the heater, circulator pump, heater indicator light and microprocessor safety thermostat. Stainless steel gable cover is included. Baked powder-coated finish on exterior is scratch and chemical resistant. Precision rubber duck included. UL listed. 240V models are available—ask your sales or customer service representative for details.

#### Specifications:

Temperature range w/cover .....Ambient plus 5°C to 99.9°C

Temp w/out cover .....Ambient plus 5°C to 70°C

Capacity .....19L

Power requirement .....120V, 50/60 Hz, 1000W, 8.3A

#### Dimensions (W x D x H)

Chamber ..... 15 x 12 x 7½ in.

Overall ..... 24½ x 14 x 9½ in.

| Cat. No. | Mfr. No. | Description                  | Qty. |
|----------|----------|------------------------------|------|
| W3085-5A | 2864     | 19L - circulating water bath | 1/ea |

## Looking for a specific product?

If you know the catalog number of the product you need, you can use the Catalog Number Index to direct you to the correct page.

# Constant Temperature

## Water Baths

### Thermo Scientific™ Precision™ General-Purpose Water Baths

THERMO SCIENTIFIC - These general-purpose water baths are designed for constant performance. A sensor is located outside the bath chamber for accurate heat control—analog models have a hydraulic thermostat sensor while digital models have an RTD sensor. Obstruction-free stainless steel chamber with rounded corners makes cleaning an easy task. Welded steel cabinet has baked powder finish to resist chemicals and scratches. Low-wattage, bolt-on immersion heater saves energy and will not burn out if bath runs dry. Baths have fiberglass insulation on five sides. Analog models include a 20°C to 100°C thermometer. All units include adjustable diffuser shelf, grounded line cord and the Precision rubber duck. Units have stainless steel gable cover except B7008-1A and B7009-2, which have polypropylene cover. CSA approved, UL listed. 240V models are available—ask your sales or customer service representative for details.



#### Specifications:

Temperature range w/cover ..... Ambient plus 5°C to 100°C

#### B7009-2

Capacity ..... 2.5L

Power requirement ..... 120V, 50/60 Hz, 225W

#### Dimensions (W x D x H)

Chamber ..... 5 x 6 x 6 in.

Overall ..... 8 x 9 3/4 x 9 3/4 in.

#### B7009-3

Capacity ..... 5.5L

Power requirement ..... 120V, 50/60 Hz, 300W

#### Dimensions (W x D x H)

Chamber ..... 6 x 11 1/2 x 6 in.

Overall ..... 8 x 15 1/4 x 9 3/4 in.

#### B7008-2A

Capacity ..... 5.5L

Power requirement ..... 120V, 50/60 Hz, 300W

#### Dimensions (W x D x H)

Chamber ..... 6 x 11 1/2 x 6 in.

Overall ..... 8 x 16 1/2 x 9 3/4 in.

| Cat. No. | Mfr. No. | Description               | Qty. |
|----------|----------|---------------------------|------|
| B7009-2  | 2829     | 2.5L - digital water bath | 1/ea |
| B7009-3  | 2833     | 5.5L - digital water bath | 1/ea |
| B7008-2A | 2831     | 5.5L - analog water bath  | 1/ea |

### Thermo Scientific™ Precision™ Molecular Biology Bath

THERMO SCIENTIFIC - The shallow chamber of this bath is ideal for incubation of microcentrifuge tubes and thawing of cryopreservation vials. Temperature uniformity at 37°C meets Class 1A requirements as tested by ASTM method E175. This rating ensures that all samples in the bath are exposed to the same uniform temperature. Temperature control system is hydraulic with analog readout. The electropolished stainless steel chamber resists electrolysis and corrosion and has rounded corners for easy cleaning. Baked powder-coated finish is chemical and scratch resistant. Compact units occupy less than 1 sq. ft. of bench space. This unit includes a thermometer, elevated sample platform and stainless steel gable cover. CSA approved, UL listed. 240V models are available—ask your sales or customer service representative for details.

#### Specifications:

Temperature range w/cover ..... Ambient plus 5°C to 95°C

Capacity ..... 1.5L

#### Uniformity

37°C ..... ±0.2°

56°C ..... ±0.3°

#### Dimensions (W x D x H)

Chamber ..... 6 x 11.5 x 2 in.

Overall ..... 8.9 x 14 x 6.7 in.

| Cat. No. | Mfr. No. | Description                          | Qty. |
|----------|----------|--------------------------------------|------|
| M7658-1A | 2823     | 1.5L - molecular biology bath - 120V | 1/ea |

# Constant Temperature

## Water Baths



### Thermo Scientific™ Precision™ Shaker Water Baths

THERMO SCIENTIFIC - This bath provides digital accuracy and convenience for enzyme activations, hybridization studies, tissue dissociations and homogenate and RIA studies. Push-button temperature selection and LED readout are in increments of 0.1°C. A microprocessor proportional heating circuit controls the temperature with an indicator light and a high-limit thermostat. The unit can be used as a standard shaker without heat and water. Immersion heaters are made of low-watt density nickel alloy. The chamber, shaker platform and other chamber parts are made of rust-resistant stainless steel. Powder-coated steel cabinets resist scratches and chemicals. This unit includes stainless steel gable cover, removable tray and Precision rubber duck. UL listed. 240V model is available—ask your sales or customer service representative for details.

#### Specifications:

Shaking speed ..... 30 to 200 strokes/min.  
Stroke length ..... 13 to 38mm  
Capacity ..... 14.5L  
Power requirements ..... 120V, 50/60 Hz, 1000W, 8.8A

#### Maximum temperature

Uncovered ..... 70°C  
Covered ..... 99.9°C  
Temperature ..... ±0.05°C

#### Dimensions (W x D x H)

Chamber ..... 15 x 12 x 7½ in.  
Exterior ..... 24½ x 14 x 9½ in.

| Cat. No. | Mfr. No. | Description                     | Qty. |
|----------|----------|---------------------------------|------|
| W3380-1A | 2870     | 14.5L shaking water bath - 120V | 1/ea |



### Boekel Hot Tubs General-Purpose Water Baths

BOEKEL - These unstirred water baths offer excellent performance and are ideal for general lab applications. They feature a PID controller for easy temperature selection, rapid heat-up and excellent stability (±0.1°C). You can program the timer up to 99 hrs., 59 min. The baths will stop heating when the timed mode is complete. The water baths also feature a seamless passivated stainless steel tank and include a stainless steel diffuser tray/shelf. Easy operation instructions are clearly printed on the front of each unit. The temperature can be set in 0.1°C increments up to 100°C. These baths can also be used as a boiling water bath. Each unit is supplied with a polycarbonate lid. A stainless steel gabled lid, available separately, is required when you place the unit in the boiling mode.

#### Specifications:

Power requirements ..... 115VAC, 50/60 Hz

#### PB-600A - Dimensions (W x L x H)

Tank ..... 11.75 x 6 x 5.5 in.  
Overall ..... 13.25 x 8.25 x 9.88 in.

#### PB-1400A - Dimensions (W x L x H)

Tank ..... 11.75 x 12.75 x 5.75 in.  
Overall ..... 13.25 x 15.13 x 9.63 in.

#### PB-2800A - Dimensions (W x L x H)

Tank ..... 11.75 x 20 x 7.5 in.  
Overall ..... 13.25 x 22.13 x 11.63 in.

| Cat. No. | Mfr. No. | Description                   | Qty. |
|----------|----------|-------------------------------|------|
| PB-600A  | 290100   | 6L volume - 360W power req.   | 1/ea |
| PB-1400A | 290200   | 14L volume - 700W power req.  | 1/ea |
| PB-2800A | 290300   | 28L volume - 1400W power req. | 1/ea |

# Constant Temperature

## Water Baths



### MiniFridge II Cold Block Incubator

BOEKEL - Use this MiniFridge II Cold Block in your laboratory for convenient, reliable sample incubation and storage at temperatures from 4°C to ambient. A press-to-set microprocessor controller lets you set temperatures quickly and easily and a large LCD allows you to visually monitor temperatures. The dry cold provides an ideal substitute for messy ice buckets.

Unit has a large open well that holds up to two standard 2 x 3 x 3¾ in. dry blocks (sold separately). A large variety of dry block modules are available. The MiniFridge II unit can also function as a small refrigerated water bath, accommodating flasks or beakers.

#### Specifications:

Temperature range ..... 4°C to ambient  
Power requirements ..... 115VAC, 50 Hz, 100W

#### Dimensions (W x D x H)

Body ..... 11¾ x 9¾ x 7¼ in. (29.8 x 24.8 x 18.4cm)  
Well ..... 6½ x 3¾ x 2½ in. (15.4 x 9.7 x 5.7cm)

| Cat. No. | Mfr. No. | Description          | Qty. |
|----------|----------|----------------------|------|
| J1667-10 | 260009   | Cold block incubator | 1/ea |



### PolyScience Digital Water Baths

POLYSCIENCE - These microprocessor-controlled water baths combine superior temperature control, range and uniformity. Three user-defined temperature preset buttons allow for quick selection of common set points and the bright, easy-to-read LED temperature display offers added convenience. Dual thermostats provide optimal protection. A secondary safety set thermostat guards against thermal runaway, automatically cutting power to the heater at the onset of extreme temperatures or low liquid levels. The tilting transparent gabled cover accommodates glassware of various heights and permits easy loading and removal of samples while allowing condensate to drain neatly back into the bath. Choose from four capacities. Stability is ±0.25°C.

#### Specifications:

Temperature Range ..... Ambient +5°C to 100°C  
Temperature Readout ..... 0.1°C

#### B3686-10

Power requirement ..... 120V, 60Hz, 2.5A

#### Dimensions (L x W x H)

Overall ..... 10.2 x 8 x 11.8 in. (25.9 x 20.3 x 30cm)  
Opening ..... 3.9 x 4.3 x 5.5 in. (9.9 x 10.9 x 14cm)

#### B3686-11

Power requirement ..... 120V, 60Hz, 4.2A

#### Dimensions (L x W x H)

Overall ..... 10.6 x 13.6 x 12 in. (26.9 x 34.5 x 30.4cm)  
Opening ..... 5 x 10.8 x 5.5 in. (12.7 x 27.4 x 14cm)

#### B3686-12

Power requirement ..... 120V, 60Hz, 4.2A

#### Dimensions (L x W x H)

Overall ..... 16.7 x 14.8 x 11.8 in. (42.4 x 37.6 x 30cm)  
Opening ..... 10.6 x 11.6 x 5.5 in. (26.9 x 29.5 x 14cm)

#### B3686-13

Power requirement ..... 120V, 60Hz, 8.3A

#### Dimensions (L x W x H)

Overall ..... 16.4 x 21.6 x 12 in. (41.5 x 54.8 x 30.5cm)  
Opening ..... 9.5 x 17.5 x 5 in. (24.1 x 44.5 x 12.7cm)

| Cat. No. | Mfr. No. | Description | Qty. |
|----------|----------|-------------|------|
| B3686-10 | WD02A11B | 2L          | 1/ea |
| B3686-11 | WD05A11B | 5L          | 1/ea |
| B3686-12 | WD10A11B | 10L         | 1/ea |
| B3686-13 | WD20A11B | 20L         | 1/ea |

## Pricing

Please call your sales or customer service representative to check up-to-the-minute pricing and availability.

# Constant Temperature

## Water Baths



### PolyScience Economy Water Baths

**POLYSCIENCE** - These versatile water baths offer superior temperature control and range. Suitable for a wide range of general laboratory applications, they maintain temperatures from 5°C above ambient to 100°C with a ±0.2°C uniformity. The tilting transparent gabled cover accommodates glassware of various heights and permits easy loading and removal of samples while allowing condensate to drain back into the bath. Dual thermostats provide optimal protection and a secondary safety set thermostat guards against thermal runaway. Choose from four capacities. Stability is ±0.25°C.

#### Specifications:

Temperature range ..... Ambient +5°C to 100°C

#### B3686-14

Power requirement ..... 120V, 60Hz, 2.5A

#### Dimensions (L x W x H)

Overall ..... 11 x 8 x 11.8 in. (27.7 x 20.3 x 30cm)

Opening ..... 3.9 x 4.3 x 5.5 in. (9.9 x 10.9 x 14cm)

#### B3686-15

Power requirement ..... 120V, 60Hz, 4.2A

#### Dimensions (L x W x H)

Overall ..... 11.4 x 13.6 x 12 in. (28.9 x 34.5 x 30.4cm)

Opening ..... 5 x 10.8 x 5.5 in. (12.7 x 27.4 x 14cm)

#### B3686-16

Power requirement ..... 120V, 60Hz, 4.2A

#### Dimensions (L x W x H)

Overall ..... 17.5 x 14.8 x 11.8 in. (44.5 x 37.6 x 30cm)

Opening ..... 10.6 x 11.6 x 5.5 in. (26.9 x 29.5 x 14cm)

#### B3686-17

Power requirement ..... 120V, 60Hz, 8.3A

#### Dimensions (L x W x H)

Overall ..... 17.1 x 21.6 x 12 in. (43.4 x 54.8 x 30.5cm)

Opening ..... 9.5 x 17.5 x 5 in. (24.1 x 44.5 x 12.7cm)

| Cat. No. | Mfr. No. | Description | Qty. |
|----------|----------|-------------|------|
| B3686-14 | WA02A11B | 2L          | 1/ea |
| B3686-15 | WA05A11B | 5L          | 1/ea |
| B3686-16 | WA10A11B | 10L         | 1/ea |
| B3686-17 | WA20A11B | 20L         | 1/ea |



### SHEL LAB® Shaking Water Baths

**SHELDON MFG** - Capable of handling a wide variety of applications, these shaking water baths provide precise microprocessor-controlled temperature control and a smooth, reciprocal shaking motion. They feature independent oscillator control, allowing bath to also be used for regular constant temperature water bath applications such as thawing, warming reagents and general incubation. An adjustable stroke length can be set at 0.5, 1 or 1.5 in. to change the degree of agitation. Available in two sizes, baths have a stainless steel tank and include a stainless steel gable cover.

#### Specifications:

Oscillation rate ..... 20 to 200 rpm

Temperature range ..... Ambient +5°C to 90°C

Temperature uniformity ..... ±0.2°C at 37°C

#### 17L water bath dimensions

Interior ..... 12 x 15 x 8 in.

Exterior ..... 16 x 25 x 13 in.

Platform ..... 11 x 13 x 8 in.

#### 27L water bath dimensions

Interior ..... 27 x 12 x 7 in.

Exterior ..... 38 x 15 x 13 in.

Platform ..... 11 x 25 x 8 in.

| Cat. No. | Mfr. No. | Description | Qty. |
|----------|----------|-------------|------|
| WS17     | WS17     | 17L - 120V  | 1/ea |
| WS17-2   | WS17-2   | 17L - 220V  | 1/ea |
| WS27     | WS27     | 27L - 120V  | 1/ea |
| WS27-2   | WS27-2   | 27L - 220V  | 1/ea |

# Furniture

## Blood Draw Chairs

### Bariatric Blood Drawing Chairs

**CARDINAL HEALTH** - These chairs are durable and constructed for long life. Rated to accommodate up to 700 lbs., the chair comfortably seats larger-proportioned individuals or an adult with a small child. This gray vinyl upholstered chair features two hinged, padded arms and a type 304 stainless steel footrest. Constructed of a powder-coated, glacier white 1 in. square tubular steel frame, this sturdy unit comes with a 10-year limited warranty on materials and workmanship. Two easy-to-use knob mechanisms on each arm allow for incremental adjustment. The hinged arms may be lifted upright to vertical and the elevated seat reduces back strain on the technician. The vinyl upholstery on this chair is durable and easy to clean. Dimensions for chair only (W x D x H): 50.10 x 30.75 x 43.45 in. The optional storage cabinet is constructed of epoxy-coated steel with a laminate top and has a slide-out tray with inside dimensions (W x D): 14 x 20.5 in. The tray is removable for cleaning and the cabinet placement is interchangeable from the left side to the right side of the chair. Some assembly is required. Dimensions for chair with cabinet (W x D x H): 67.10 x 30.75 x 43.45 in.



| Cat. No. | Mfr. No. | Description           | Qty. |
|----------|----------|-----------------------|------|
| L5165-4A | 1132202  | Chair without cabinet | 1/ea |
| L5165-5A | 1132203  | Chair with cabinet    | 1/ea |

### Bariatric Blood Drawing Chair with Flip-Arms

**CLINTON INDUSTRIES** - Chair features padded and upholstered seat, back and armrests. Accommodates a larger patient or child with adult up to 700 lbs. combined weight. Includes two adjustable flip-arms. Seat has additional depth and an extra center support for added strength. Larger size makes chair more accessible for patient and technician. Adjustable height and depth flip-arms. Armrests lock in place when in use, then flip out of the way for easy exit. Comfortable 2 in. padding. Easy-clean, antimicrobial, heavyweight, vinyl upholstery. Neutral gray powder-coated frame. Two knobs lock chrome armrests into position. Adjustable foot levelers. Chairs may be special ordered with straight armrests instead of flip-arms (677 option).



| Cat. No.  | Mfr. No. | Description                    | Qty. |
|-----------|----------|--------------------------------|------|
| CT6000B-F | 6000B-F  | Bariatric chair with flip-arms | 1/ea |

### Bariatric Blood Drawing Chairs

**CLINTON INDUSTRIES** - These blood-drawing chairs have seats with additional depth and extra center support for added strength. Weight capacity is 700 lbs. Comfortable 2 in. padding throughout is covered with an antimicrobial, heavyweight vinyl upholstery that is easy to clean. The chairs' 35 x 21 in. seats sit 20 in. H and arms adjust from 29 to 34 in. H. Additional features include locking armrest that flips up for easy exit, neutral gray powder-coated frame and adjustable foot levelers.

| Cat. No.   | Mfr. No. | Description | Qty. |
|--|----------|-------------|------|
| <b>With two adjustable arms, 48 x 32 in. (W x D)</b>               |          |             |      |
| 600BF3BK   | 600BF3BK | Black       | 1/ea |
| 600BF3CS   | 600BF3CS | Clamshell   | 1/ea |
| 600BF3GM   | 600BF3GM | Gunmetal    | 1/ea |
| 600BF3WW   | 600BF3WW | Wedgewood   | 1/ea |
| <b>With one adjustable arm and one drawer, 58 x 32 in. (W x D)</b> |          |             |      |
| 60BFD3BK   | 60BFD3BK | Black       | 1/ea |
| 60BFD3CS   | 60BFD3CS | Clamshell   | 1/ea |
| 60BFD3GM   | 60BFD3GM | Gunmetal    | 1/ea |
| 60BFD3WW   | 60BFD3WW | Wedgewood   | 1/ea |

### Blood Drawing Chairs

**CARDINAL HEALTH** - For patient comfort and safety, our blood drawing chairs feature a contoured, cushioned arm that extends across the front of the chair, allowing you to draw blood from either arm. The arm easily adjusts to fit any size patient and is angled to support the patient's arm in a fully extended position for easier venipuncture. The elevated seat on these chairs places the patient at the ideal height to allow you to draw blood with limited back strain. A stainless steel footrest provides support for the patient. Constructed of scratch-resistant, compression-molded polyester with a durable, powder-coated tubular steel base. Models L5165-2A and L5165-3A also feature a powder-coated steel storage cabinet with padded urethane top and slide-out tray of high-impact ABS plastic.



| Cat. No. | Description   | Qty. |
|----------|---|------|
| L5165-1A | Blood drawing chair                                 | 1/ea |
| L5165-2A | Blood drawing chair w/side storage cabinet          | 1/ea |
| L5165-3A | Double blood drawing chair w/center storage cabinet | 1/ea |

### Blood Drawing Chair

**CLINTON INDUSTRIES** - Chair features padded and upholstered seat, back and armrests and adjustable arms. All-welded steel frame. Adjustable height and depth flip-arm. Armrest locks in place when in use, then flips out of the way for easy exit. Comfortable 2 in. padding. Easy-clean, antimicrobial, heavyweight, vinyl upholstery. White powder-coated frame. Two knobs lock chrome armrest into position. Non-marking glides. Adjustable arm width. Weight capacity: 300 lbs.



| Cat. No.   | Mfr. No. | Description | Qty. |
|------------|----------|-------------|------|
| CT64950-BF | 64950-BF | Chair       | 1/ea |

## Blood Draw Chairs

### Blood Drawing Chair Flip-Arm

CLINTON INDUSTRIES - Chair features an adjustable, padded and upholstered flip-arm. Model CT6020-F has a one-piece drawer. Variety of load capacities are offered.

- 1 1/4 in. square, heavy-duty, all-welded, tubular steel frame
- Adjustable height and depth flip-arm
- Armrest locks in place when in use, then flips out of the way for easy exit
- Comfortable 2 in. padding throughout
- Neutral gray powder-coated frame
- Two knobs lock chrome armrest into position
- Adjustable foot levelers
- Easy-clean durable antimicrobial vinyl
- Complete series of chairs to choose from
- Padded and upholstered seat and back



| Cat. No. | Mfr. No. | Description                    | Qty. |
|----------|----------|--------------------------------|------|
| CT6020-F | 6020-F   | Chair with flip-arm and drawer | 1/ea |
| CT6010-F | 6010-F   | Chair with flip-arm            | 1/ea |

### Extra-Tall Blood Drawing Chair with Flip-Arm and Drawer

CLINTON INDUSTRIES - Chair features an adjustable, padded and upholstered flip-arm and an easy-clean, one-piece drawer. Extra height reduces bending for staff and makes it easy for patients to sit and exit chair. A footrest is included for the patient.

- 1 1/4 in. square, heavy-duty, all-welded, tubular steel frame
- Adjustable height and depth flip-arm
- Armrest locks in place when in use, then flips out of the way for easy exit
- Comfortable 2 in. padding throughout
- Neutral gray powder-coated frame
- Two knobs lock chrome armrest into position
- Adjustable foot levelers
- Easy-clean durable antimicrobial vinyl
- Weight capacity: 400 lbs.



| Cat. No. | Mfr. No. | Description                    | Qty. |
|----------|----------|--------------------------------|------|
| CT6022-F | 6022-F   | Chair - extra tall with drawer | 1/ea |

### Extra-Tall and Wide Blood Drawing Chair with Flip-Arms

CLINTON INDUSTRIES - Chair features padded and upholstered seat, back and armrests. Extra height reduces bending for staff. Accommodates large patient or child with adult up to 400 lbs. combined weight.

- Includes two adjustable flip-arms
- 1 1/4 in. square, heavy-duty, all-welded, tubular steel frame
- Adjustable height and depth flip-arm
- Armrest locks in place when in use, then flips out of the way for easy exit
- Comfortable 2 in. padding throughout
- Neutral gray powder-coated frame
- Two knobs lock chrome armrests into position
- Adjustable foot levelers
- Easy-clean durable antimicrobial vinyl



| Cat. No.  | Mfr. No. | Description             | Qty. |
|-----------|----------|-------------------------|------|
| CT6099-FA | 6099-F   | Chair - extra tall/wide | 1/ea |

### Care Clinet™ Drop-Arm Recliners

WINCO - Suitable for use in dialysis, oncology, acute care and other clinical environments, these recliners provide superior comfort and support to your patients. The side arms drop level with the seat and assist in patient transfer to and from wheelchairs or for emergency access. Construction incorporates a unidirectional elastic seat and back support system, built-in headrest and one-touch release for the dual drop-arms. Trendelenberg release bar on seatback is accessible from either side of the chair. Recliner includes dual, fold-down side trays that help contain spills. The side-panels are removable for cleaning and maintenance. Configured with three-directional and one total lock 5 in. nylon casters. Weight capacity: 275 lbs.

| Cat. No. | Mfr. No. | Description                 | Qty. |
|----------|----------|-----------------------------|------|
| WI655-17 | 6550-17  | Blueridge drop-arm recliner | 1/ea |



# Furniture

## Blood Draw Chairs



### Care Cliner™ Three-Position Recliners

**WINCO** - These recliners are suitable for use in dialysis, blood collection, oncology, respiratory, critical care and cardiac care. They feature left and right blow-molded flip-up side tables. Three comfortable, patient operated seating positions are standard. The Trendelenburg release handle can be easily operated from either side of chair by attendant. A unidirectional, full coverage, elastic support system in the seat base and back support area provide individualized patient comfort. The steel frame is powder-coated and the chair has steel or optional rust-resistant vinyl casters. Seat height is 21 in. and seat back width is 21 in. Overall dimensions (H x W): 49 x 30½ in. Weight capacity: 275 lbs.

| Cat. No. | Mfr. No. | Description           | Qty. |
|----------|----------|-----------------------|------|
| WI653-17 | 6531-17  | Blueridge recliner    | 1/ea |
| WI653-14 | 6531-14  | Burgundy recliner     | 1/ea |
| WI653-06 | 6531-06  | Hunter green recliner | 1/ea |
| WI653-02 | 6531-02  | Royal blue recliner   | 1/ea |



### Care Cliner™ XL Recliners

**WINCO** - Extra-large recliners offer higher weight capacities and wider seating areas for safe and comfortable handling of larger patient populations. Recliners have three comfortable patient-operated seating positions. The Trendelenburg release handle can be easily operated from either side of chair by attendant. A unidirectional, extra-capacity, full coverage, elastic support system in the seat base and back support area provide individualized patient comfort. The steel frame is powder-coated with a lifetime warranty. Four heavy-duty 5 in. steel or optional vinyl casters have positive locking swivel and wheel brakes. Seat height is 21 in. and seat back width is 25 in. Overall dimensions (H x W): 49 x 35 in. Weight capacity: 450 lbs.

| Cat. No. | Mfr. No. | Description              | Qty. |
|----------|----------|--------------------------|------|
| WI654-14 | 6541-14  | Burgundy XL recliner     | 1/ea |
| WI654-06 | 6541-06  | Hunter green XL recliner | 1/ea |
| WI654-16 | 6541-17  | Mauve XL recliner        | 1/ea |
| WI654-02 | 6541-02  | Royal blue XL recliner   | 1/ea |



### Designer™ Blood Drawing Chairs

**WINCO** - These chairs feature a padded seat and back, nonslip rubber feet and high-strength steel frame. They are cushioned with 1¼ in. medium density foam for enhanced comfort. The armrest height can be adjusted and a reversible armrest can be mounted to provide support across front of patient or angled arm support on side. Neutral gray powder coating provides a durable finish and gray laminate is easy to clean. A variety of upholstery colors are available. Regular chairs have a seat width of 18 in. and a weight capacity of 300 lbs. XL chairs have a seat width of 24 in. and a weight capacity of 450 lbs.

| Cat. No.              | Mfr. No. | Description  | Qty. |
|-----------------------|----------|--------------|------|
| <b>Regular chairs</b> |          |              |      |
| WI573-17              | 2573-17  | Blueridge    | 1/ea |
| WI573-14              | 2573-14  | Burgundy     | 1/ea |
| WI573-06              | 2573-06  | Hunter green | 1/ea |
| WI573-02              | 2573-02  | Royal blue   | 1/ea |
| <b>XL chairs</b>      |          |              |      |
| WI575-17              | 2575-17  | Blueridge    | 1/ea |
| WI575-14              | 2575-14  | Burgundy     | 1/ea |
| WI575-06              | 2575-06  | Hunter green | 1/ea |
| WI575-02              | 2575-02  | Royal blue   | 1/ea |



### Economy Blood Drawing Chairs

**WINCO** - The flip-up contoured urethane armrest provides comfort, easy access and added safety for the user. Offers a durable easy-clean seat and back, laminated cabinet and drawer with glides and sturdy leveling feet, to provide years of trouble-free service. Chair with cabinet features durable plastic resin seat and non-marring leveling feet.

| Cat. No. | Mfr. No. | Description        | Qty. |
|----------|----------|--------------------|------|
| WI571    | 2571     | Chair              | 1/ea |
| WI570    | 2570     | Chair with cabinet | 1/ea |

## Blood Draw Chairs/Carts

**Padded Blood Drawing Chair with Cabinet**

WINCO - This chair features a padded seat and back, complete with drawer storage cabinet. The adjustable flip-up contoured urethane armrest provides easy access and superior safety for the user.



| Cat. No. | Mfr. No. | Description        | Qty. |
|----------|----------|--------------------|------|
| WI572-06 | 2572-06  | Chair with cabinet | 1/ea |

**XL Convalescent Recliner**

WINCO - This recliner features a unique full-coverage elastic support system for enhanced patient comfort. The oversized footrest gives tall patients foot support. Features 5 in. total lock casters in the rear with 5 in. rigid casters in front. Includes dual non-porous blow molded trays, comfortable, ergonomic, built-in headrest and heavy-gauge expanded vinyl. This extra weight recliner has a 450 lbs. weight capacity and a wider seat for larger patients.



| Cat. No.  | Mfr. No.   | Description       | Qty. |
|-----------|------------|-------------------|------|
| WI529-14T | 5291-14-TB | Burgundy XL chair | 1/ea |

**ZIDO Fixed-Height Work Station**

ANTHRO CORP - Comes with wood cap shelf, cap shelf bracket, 2.5 in. dia. column with holes in 1 in. increments for accessory. The cap shelf has a weight capacity of 50 lbs. Includes 4 casters (4 in. size, 2 locking). Available in Slate Blue (SB) metal with Cool Grey (CG) laminate. Heavy cast metal base.



| Cat. N.  | Mfr. No.     | Description (W x H) | Qty. |
|----------|--------------|---------------------|------|
| L5012-13 | ZD2535SB/CG4 | 25 x 35 in.         | 1/ea |

**Glassware Cart**

LABCONCO - This chemical-resistant cart is designed for transporting laboratory glassware. A large pan helps protect the floor from dripping moisture. Portable wire baskets feature a corrosion-resistant vinyl coating to cushion labware. Cart has 1 in. square steel tubing with welded construction, ergonomic rubber handle grips and is mounted on 4 in. casters, two with toe locks. Dimensions (W x D x H): 34 $\frac{1}{8}$  x 19 x 36 $\frac{3}{8}$  in.



| Cat. No. | Mfr. No. | Description                       | Qty. |
|----------|----------|-----------------------------------|------|
| C1253    | 8045000  | With four 16 x 18 x 4 in. baskets | 1/ea |

**Instrument Desk**

LABCONCO - This desk includes 4 in. casters (two with toe locks) for mobile or stationary use. It features standard desk height with a center reinforcing bar to allow seating from either side. Top is phenolic board with high-pressure melamine laminate surface and handle has ergonomic rubber grip. Glacier white epoxy-coated frame is welded of 1 in. square steel tubing. The desk holds up to 400 lbs. Dimensions (W x L x H): 42 $\frac{1}{8}$  x 19 x 31 $\frac{1}{8}$  in.



| Cat. No. | Mfr. No. | Description     | Qty. |
|----------|----------|-----------------|------|
| C1262    | 8052500  | Instrument desk | 1/ea |

**LOGIC® Cart**

LABCONCO - This cart is specifically designed to store supplies commonly used in biological safety cabinets. It fits easily under Purifier® Logic®+ Class II Biosafety Cabinets mounted on telescoping base stands adjusted to any height. Cart features 2 in. dia. casters and handles, allowing it to be easily moved within your reach. Cart consists of three right-side compartments for pipettes and other supplies, a top left-side compartment with front panel cutouts for boxes of wipes and gloves, a drawer to hold a variety of miscellaneous supplies and an open storage area in the bottom to hold larger equipment and supplies. Cart's work surface and bottom are constructed of easy-to-clean, corrosion-resistant white HDPE. Remaining parts are constructed of corrosion-resistant white ABS. Dimensions (W x D x H): 25 x 19 x 27 in.



| Cat. No. | Mfr. No. | Description | Qty. |
|----------|----------|-------------|------|
| L5302-21 | 8022000  | Cart        | 1/ea |

# Furniture

## Carts

### Mobile Bench

LABCONCO - This heavy-duty auxiliary bench may be transported from lab to lab. The cart has 5 in. toe-locking polyurethane casters and 2 in. square steel tubing frame. Holds up to 540 lbs. Lifetime guarantee. Dimensions (W x L x H): 24 x 48 x 37½ in.



| Cat. No. | Mfr. No. | Description  | Qty. |
|----------|----------|--------------|------|
| C1260-1  | 8060000  | Mobile bench | 1/ea |

### Pan Cart

LABCONCO - This pan cart transports wet or soiled glassware, labware and other materials. Features two 2 in. deep powder-coated steel removable watertight pans. The unit is lined with removable gray rubber mats to help prevent loads from shifting. The pan cart ships fully factory-assembled and ready to roll on its 4 in. dia. casters. Features include ergonomic, extruded rubber handle grips; a durable glacier white, powder-coated 18G welded tubular steel frame and ID tag. The pan cart can support loads up to 400 lbs. and comes with a lifetime guarantee. Dimensions (L x W x H): 34½ x 19 x 36½ in.



| Cat. No. | Mfr. No. | Description         | Qty. |
|----------|----------|---------------------|------|
| C1256    | 8047500  | Laboratory pan cart | 1/ea |

### Portable Table

LABCONCO - Use this portable table as a mobile workstation. Two open shelves make equipment transfer easy from countertop to cart. Table features 1 in. square steel tubing and has 4 in. casters for mobility, two with toe locks. Shelves of glacier white phenolic board with high-pressure melamine laminate surface resist staining and corrosion. Handles have ergonomic rubber grips. Holds up to 400 lbs. Dimensions (H x D x W): 36¾ x 19 x 34¾ in.



| Cat. No. | Mfr. No. | Description    | Qty. |
|----------|----------|----------------|------|
| 80250    | 8025000  | Portable table | 1/ea |

### Stainless Steel Laboratory Cart

LABCONCO - You can use this stainless steel laboratory cart to hold a variety of laboratory supplies, equipment and miscellaneous containers. It includes two removable polished type 304 stainless steel pans that are 2 in. deep on three sides. An open side makes equipment transfer easy. The pans rest on a durable glacier white frame that is welded 1 in. square steel tubing with corrosion-resistant, baked-on powder coating. Four 4 in. casters, two with toe locks, stabilize movement over rough, uneven floors. Handles have ergonomic rubber grips. Delivered with no assembly required. Cart holds up to 400 lbs. Dimensions (W x D x H): 34½ x 19½ x 36½ in.



| Cat. No. | Mfr. No. | Description              | Qty. |
|----------|----------|--------------------------|------|
| C1257    | 8019000  | Stainless steel lab cart | 1/ea |

### Variable-Height Mobile Bench

LABCONCO - This mobile bench provides additional working space, with an adjustable height (29½ to 37½ in.) for applications involving sitting or standing. The work surface offers more than 7 sq. ft. of space. The 5 in. polyurethane casters have toe locks. Bench holds up to 540 lbs. Dimensions: (W x L) 28 x 38 in.



| Cat. No. | Mfr. No. | Description                  | Qty. |
|----------|----------|------------------------------|------|
| C1260-5  | 8075000  | Variable-height mobile bench | 1/ea |

### Stainless Steel Utility Carts

LAKESIDE MFG CO - Constructed of rugged stainless steel, these carts maneuver easily to transport supplies and equipment where needed. The rubber bumpers on the uprights and handles help protect walls and furniture from damage. Reinforced shelf edges help prevent items from rolling or sliding off.

| Cat. No.  | Mfr. No. | Description         | Qty. |
|---|----------|---------------------|------|
| <b>300 lbs. capacity cart with 4 swivel casters</b>               |          |                     |      |
| C12021  | 311      | 16¼ x 27½ x 32½ in. | 1/ea |
| <b>400 lbs. capacity cart with 4 swivel casters</b>               |          |                     |      |
| C1202-3   | 444      | 22¾ x 39¼ x 37¼ in. | 1/ea |
| <b>500 lbs. capacity cart with guardrail and 4 swivel casters</b> |          |                     |      |
| C1202-23  | 526      | 19 x 31 x 33¾ in.   | 1/ea |

**Tubular Stainless Steel Utility Cart**

LAKESIDE - Stainless steel utility carts feature a 20G top shelf with reinforced front and back, swivel casters and heavy chrome legs. 1 in. O.D.

**Specifications**

Capacity ..... 500 lbs.

Shelf clearance ..... 18 $\frac{3}{4}$  in.

Casters ..... 4 in.

**Dimensions**

Shelves ..... 15 $\frac{1}{2}$  x 24 in.

Overall (W x D x H) ..... 17 $\frac{1}{2}$  x 27 x 35 $\frac{3}{4}$  in.



| Cat. No. | Mfr. No. | Description    | Qty. |
|----------|----------|----------------|------|
| C1202-11 | 472      | Two-shelf cart | 1/ea |

**Core DX™ Lab Cart with Security Railed Top**

TRIPPNT - The Core DX™ Lab Cart with Security-Railed Top offers an efficient way to safely sort, store, organize, lock and transport a wide variety of supplies with drawers, shelves and bulk storage features. The 1.75 in. tall, four-sided rail top keeps items on the top secure. Constructed from tough, non-reactive high-density polyethylene and ABS, this lab cart glides smoothly across most surfaces on its 3 in. non-marking rubber casters. A small footprint allows it to be stored easily out of the way. The Core DX™ features three full-extension drawers, six side compartments and two with dispensing slots. A large bulk storage area with a locking, sliding, clear door secures supplies with the built-in lock.

- Edge rail on four sides
- White polyethylene, ABS and PETG construction
- Six shelves; two dispense gloves, wipers or tissues
- Three full-extension drawers
- Tool and document holder
- Lockable sliding door
- Built in, easy-to-grab handles
- 23 x 36 $\frac{1}{2}$  x 17 $\frac{3}{4}$  in. (W x H x D); 59 lbs.



| Cat. No. | Mfr. No. | Description                           | Qty. |
|----------|----------|---------------------------------------|------|
| TNT50924 | 50924    | Lab cart with railed top - 23 in. top | 1/ea |

**Deluxe Storage Cart**

TRIPPNT - The deluxe storage lab cart offers an efficient way to sort, store, organize, lock and transport a wide variety of supplies with drawers, shelves and bulk storage features. Constructed from tough, non-reactive high-density polyethylene and ABS, this lab cart glides smoothly across most surfaces on its 3 in. non-marking rubber casters. Its small footprint allows for out-of-the-way storage. Features three full-extension drawers, six side compartments and two with dispensing slots. A large bulk storage area with a sliding, clear door secures supplies with the built-in lock.

- White polyethylene, ABS and PETG construction
- Six shelves; two dispensers for gloves, wipers or tissues
- Three full-extension drawers
- Tool and document holder
- Sliding door with built-in lock
- Built-in, easy-to-grab handles
- 3 in. non-marking rubber casters
- 23 x 34 $\frac{3}{4}$  x 17 $\frac{3}{4}$  in. (W x H X D); 58 lbs.



| Cat. No. | Mfr. No. | Description               | Qty. |
|----------|----------|---------------------------|------|
| TNT50007 | 51007    | Storage cart - 23 in. top | 1/ea |

**Adjustable Five-Legged Chair**

BIOFIT - This chrome-plated, five-legged chair has fingertip control of seat height with pneumatic air-ride mechanism. Upholstered back features a plastic back panel to help protect it and is adjustable both vertically and horizontally. It is designed to provide lumbar support. The task-control backrest tilt mechanism provides ergonomic comfort and easy chair adjustment with the touch of a control paddle. The durable heavy-duty base has a 23 in. leg spread and casters as well as a 20 in. dia. footrest. Chair has black vinyl upholstery.

**Specifications:**

Seat adjustment ..... 23 to 28 in.

Seat (W x D) ..... 18 $\frac{1}{2}$  x 16 $\frac{1}{2}$  in.

Back (W x H) ..... 14 $\frac{1}{2}$  x 9 $\frac{1}{2}$  in.

Seat cushion thickness ..... 3 in.

| Cat. No. | Mfr. No.        | Description               | Qty. |
|----------|-----------------|---------------------------|------|
| L5140-26 | BTT2328-R-C-684 | Adjustable 5-legged chair | 1/ea |

# Furniture

## Chairs and Stools

### Class 100 Cleanroom Chairs

BIOFIT - The patented filtration system in the seat cushion of these chairs helps keep particle emissions at low levels for Class 100 through 1000 cleanrooms. The super-strong chrome-plated tubular base is equipped with a 20 in. dia. footing. Seat height is easily adjusted by a pneumatic air-ride mechanism. The task-control backrest tilt mechanism provides ergonomic comfort and easy chair adjustment with the touch of a control paddle. Chairs have black vinyl upholstery.

#### Specifications:

Seat (W x D) ..... 18½ x 16½ in.  
Back (W x H) ..... 14½ x 9½ in.  
Seat cushion thickness ..... 3 in.



#### Cat. No. Mfr. No. Description Qty.

| <b>With glides</b>  |                    |                        |      |
|---------------------|--------------------|------------------------|------|
| Cat. No.            | Mfr. No.           | Description            | Qty. |
| <b>L5154-19</b>     | BTT2126-VUV-684    | 21 to 26 in. seat adj. | 1/ea |
| <b>L5154-21</b>     | BTT2530-VUV-684    | 25 to 30 in. seat adj. | 1/ea |
| <b>With casters</b> |                    |                        |      |
| <b>L5154-20</b>     | BTT2328CRC-VUV-684 | 23 to 28 in. seat adj. | 1/ea |

### Deluxe Static Control Chair

BIOFIT - This ESD chair features a stable, five-legged cast aluminum base with conductive casters, brass drag chain and a 20 in. dia. chrome footing. A pneumatic mechanism makes adjusting seat height smooth and easy. Special upholstery materials and metal-to-metal contact throughout the chair effectively drains charge through the chair to the ground. Backrest adjusts both horizontally and vertically, with a task-control backrest tilt mechanism that provides ergonomic comfort and easy chair adjustment with the touch of a control paddle.

#### Specifications:

Seat adjustment ..... 23 to 28 in.  
Seat (W x D) ..... 18½ x 16½ in.  
Back (W x H) ..... 14½ x 9½ in.  
Seat cushion thickness ..... 3 in.



| Cat. No.         | Mfr. No.           | Description | Qty. |
|------------------|--------------------|-------------|------|
| <b>L5155-156</b> | BTC2328-R-K-G-MBLK | Black vinyl | 1/ea |

### Ergonomic Lab Chair

BIOFIT - Featuring a large ergonomic backrest with lumbar support, this chair is ideal for use in plants, laboratories and offices. A comfortable waterfall-front seat with internal seat board bumper guard and four-way contouring helps to properly distribute weight. The chair also features a Soft Touch pneumatic seat-height adjustment, a fixed rearward seat tilt of 3.5°, a backrest tilt and a backrest height adjustment. Chair has black vinyl upholstery and a five-legged cast aluminum base with a chrome-plated finish and a 23 in. leg spread. Five standard casters provide mobility.



#### Specifications:

Seat adjustment ..... 22 to 32 in.  
Seat (W x D) ..... 18½ x 17 in.  
Back (W x D) ..... 15½ x 14½ in.  
Seat cushion thickness ..... 3 in.

| Cat. No.        | Mfr. No.        | Description         | Qty. |
|-----------------|-----------------|---------------------|------|
| <b>4X53-C-R</b> | EEC2232-R-C-684 | Ergonomic lab chair | 1/ea |

### Five-Legged Adjustable Aluminum Stool

BIOFIT - This lightweight, polished aluminum stool features pneumatic, air-ride seat adjustment mechanism. The seat is round with black vinyl upholstery. The base has a 23 in. leg spread with casters. Bright chrome footrest is 20 in. dia.



#### Specifications:

Seat adjustment ..... 19 to 24 in.  
Seat diameter ..... 16 in.  
Seat cushion thickness ..... 3 in.

| Cat. No.        | Mfr. No.          | Description               | Qty. |
|-----------------|-------------------|---------------------------|------|
| <b>L5140-17</b> | RXC1924-R-C-G-684 | Adjustable aluminum stool | 1/ea |

### Heavy-Duty Microscope Chair

BIOFIT - This five-legged, heavy-duty tubular base chair offers increased comfort during microscope use. Seat and backrest tilt independently to give support in nearly any position. Small backrest provides ergonomic support while allowing freedom of movement. Chair has black metal frame with black vinyl upholstery.



#### Specifications:

Seat (W x D) ..... 18½ x 17 in.  
Back (W x H) ..... 8 x 12 in.  
Seat cushion thickness ..... 3 in.

| Cat. No.       | Mfr. No.           | Description                                | Qty. |
|----------------|--------------------|--|------|
| <b>L5143-8</b> | EAT2732-R-FFAC-684 | Chair with casters, 27 to 32 in. seat adj. | 1/ea |

**Heavy-Duty Static Control Chairs**

BIOFIT - These tubular base ESD chairs offer outstanding static control protection and durability. The chrome-plated base is equipped with a 20 in. dia. footring and brass drag chain. A pneumatic air-ride mechanism makes adjusting seat height easy. The comfortable upholstered seat and backrest are available in black static-dissipative vinyl. Backrest is adjustable vertically. A task-control backrest tilt mechanism provides ergonomic comfort and easy chair adjustment with the touch of a control paddle. 100% inspected to help ensure conductivity.

**Specifications:**

Seat (W x D) ..... 18½ x 16½ in.  
Back (W x H) ..... 14½ x 9½ in.  
Seat cushion thickness ..... 3 in.

| Cat. No.            | Mfr. No.         | Description            | Qty. |
|---------------------|------------------|------------------------|------|
| <b>With glides</b>  |                  |                        |      |
| L5155-142           | BTT2126-K-MBLK   | 21 to 26 in. seat adj. | 1/ea |
| <b>With casters</b> |                  |                        |      |
| L5155-146           | BTT2328-R-K-MBLK | 23 to 28 in. seat adj. | 1/ea |
| L5155-147           | BTT2732-R-K-MBLK | 27 to 32 in. seat adj. | 1/ea |

**Lab Chairs**

BIOFIT - These pneumatically operated chairs have an ergonomically designed seat and backrest with lumbar support. The seat and back tilt independently to conform to an individual's body shape and/or work position. The durable, five-legged cast aluminum base has 2 in. dia. ball bearing casters. Chairs have chrome metal parts and black vinyl upholstery.

**Specifications:**

Seat (W x D) ..... 18½ x 17 in.  
Back (W x H) ..... 14½ x 9½ in.  
Seat cushion thickness ..... 3 in.

| Cat. No. | Mfr. No.            | Description                          | Qty. |
|----------|---------------------|--------------------------------------|------|
| L5142-2  | ETC1924R-C-FFAC-684 | 19 to 24 in. seat adj. - no footrest | 1/ea |
| L5142-3  | ETC2328RCFFACATF684 | 23 to 28 in. seat adj. - footrest    | 1/ea |
| L5142-4  | ETC2530RCFFACATF684 | 25 to 30 in. seat adj. - footrest    | 1/ea |

**Microscope Chairs**

BIOFIT - These chairs help relieve back strain during microscope work. The ergonomic seat and backrest control allow both seat and backrest to tilt forward to help support the spine. The narrow backrest allows freedom of movement to shoulders, arms and elbows while providing lumbar support. The seat provides ample support without cutting off circulation to the lower legs. Chairs have a pneumatic seat height mechanism. They come with a black metal frame and black vinyl upholstery.



| Cat. No. | Mfr. No.            | Description            | Qty. |
|----------|---------------------|------------------------|------|
| L5153-2  | EAC1924R-FFAC-G-684 | 19 to 24 in. seat adj. | 1/ea |
| L5143-4  | EAC2530RFFACC-G-684 | 25 to 30 in. seat adj. | 1/ea |

**Nylon Upholstered Class 10 Chair with Tubular Base**

BIOFIT - This chair features breathable 100% nylon upholstery that is laminated with an efficient filter media to purify expelled air from cushions to Class 10 levels. The sturdy chrome-plated tubular base helps keep particulates at ultralow levels. Seat height adjusts smoothly and easily with a pneumatic mechanism. Backrest is also adjustable, with a task-control backrest tilt mechanism that provides ergonomic comfort and easy chair adjustment with the touch of a control paddle. Chair has black Nytek® upholstery.

**Specifications:**

Seat (W x D) ..... 18½ x 16½ in.  
Back (W x H) ..... 14½ x 9½ in.  
Seat cushion thickness ..... 3 in.

| Cat. No. | Mfr. No.           | Description                                 | Qty. |
|----------|--------------------|---|------|
| L5154-38 | BTT2732CRCN10J1BLK | Chair with casters - 27 to 32 in. seat adj. | 1/ea |

**Pneumatic Adjustable Five-Legged Stool**

BIOFIT - This chrome-plated, five-legged stool features pneumatic air-ride adjustment for quick and easy seat height changes. The round seat has black vinyl upholstery and a hidden bumper guard for extended upholstery life. The rugged tubular base has a 23 in. leg spread with 2 in. ball bearing casters. Excellent as a lab or examination stool.

**Specifications:**

Seat adjustment ..... 23 to 28 in.  
Seat diameter ..... 16 in.  
Seat cushion thickness ..... 3 in.

| Cat. No. | Mfr. No.        | Description                | Qty. |
|----------|-----------------|----------------------------|------|
| L5140-16 | RXT2328-R-C-684 | Pneumatic adjustable stool | 1/ea |

# Furniture

## Chairs and Stools

### Static Control Chairs

BIOFIT - These conductive chairs are for use in static-sensitive areas and must be used on a conductive floor or mat to be effective. Models are available black static-dissipative vinyl. Metal-to-metal construction ensures continuity throughout all components. Chairs are 100% inspected to help ensure conductivity. They feature an extra-stable 5-legged cast aluminum base with brass drag chain. The task-control backrest tilt mechanism provides ergonomic comfort and easy chair adjustment with the touch of a control paddle. The backrest adjusts both horizontally and vertically.



#### Specifications:

Seat (W x D) ..... 18½ x 16½ in.  
Back (W x H) ..... 14½ x 9½ in.  
Seat cushion thickness ..... 3 in.

| Cat. No.            | Mfr. No.         | Description            | Qty. |
|---------------------|------------------|------------------------|------|
| <b>With glides</b>  |                  |                        |      |
| <b>L5155-140</b>    | BTC1722-K-MBLK   | 17 to 22 in. seat adj. | 1/ea |
| <b>With casters</b> |                  |                        |      |
| <b>L5155-144</b>    | BTC1924-R-K-MBLK | 19 to 24 in. seat adj. | 1/ea |



### Ergonomic Chair and Footrest

LABCONCO - This black vinyl upholstered chair has removable armrests and features a six-way articulating seat and back control for personalized adjustment. A pneumatic mechanism lets you adjust seat height from 18¼ to 25¾ in. The chair has a black reinforced composite base with five legs that rest on 2 in. ball bearing casters. Includes aluminum support ring. Use with adjustable footrest for added comfort. Footrest elevates the feet and can be positioned at any angle. Footrest dimensions: (W x D x H): 18½ x 11½ x 8 in. Accessory to the Purifier® Logic®+ Biosafety Cabinet or for use elsewhere in your laboratory.

| Cat. No.        | Mfr. No. | Description | Qty. |
|-----------------|----------|-------------|------|
| <b>L5302-16</b> | 3744000  | Chair       | 1/ea |
| <b>L5302-17</b> | 3746000  | Footrest    | 1/ea |

### P-55 Deluxe Lab Stools

PEDIGO PRODUCTS - These stools have screw shaft height adjustment of 21½ to 33½ in. Capacity up to 300 lbs. Feature upholstered spring backs and 14 x 15 in. square cushioned seats. Rubber floor tips.

| Cat. No.        | Mfr. No. | Description | Qty. |
|-----------------|----------|-------------|------|
| <b>P-55-BGE</b> | P-55-BGE | Beige       | 1/ea |
| <b>P-55-FWY</b> | P-55-FWY | Fairway     | 1/ea |
| <b>P-55-GRY</b> | P-55-GRY | Grey        | 1/ea |
| <b>P-55-LAK</b> | P-55-LAK | Lake blue   | 1/ea |
| <b>P-55-STL</b> | P-55-STL | Steel       | 1/ea |



### P-555-GS Lab Stools

PEDIGO PRODUCTS - These stools have adjustable back support and pneumatic height adjustment (25% to 33 in.). Capacity up to 300 lbs. Feature 16 x 17 in. contoured seats and easy-rolling 2½ in. casters.

| Cat. No.          | Mfr. No.     | Description | Qty. |
|-------------------|--------------|-------------|------|
| <b>P-555-GS-B</b> | P-555-GS-BGE | Beige       | 1/ea |
| <b>P-555-GS-F</b> | P-555-GS-FWY | Fairway     | 1/ea |
| <b>P-555-GS-G</b> | P-555-GS-GRY | Grey        | 1/ea |
| <b>P-555-GS-L</b> | P-555-GS-LAK | Lake blue   | 1/ea |
| <b>P-555-GS-S</b> | P-555-GS-STL | Steel       | 1/ea |

Online ordering services at [cardinalhealth.com](http://cardinalhealth.com) put you in command.

### Thermo Scientific GENESYS™ 20 Spectrophotometers

THERMO SCIENTIFIC - Compact, rugged and easy-to-use, these sleek instruments house up-to-date electronics and unsurpassed optical components for excellent performance, capabilities and longevity. Only 10 keys simplify use while the two-line, 20-character LCD readout displays data and provides straightforward instructions. Clear messages indicate error conditions. In just four simple steps, you can measure absorbance or transmittance. To run concentrations, just follow the instructions on the display. The cuvette holder provided with the spectrophotometer works with 10mm square cuvettes, 10mm test tubes or SPECTRONIC® 20½ in. test tubes. Optional snap-in holders are available for COD test tubes, 1 in. test tubes, filters and lenses or—for increased sensitivity—cylindrical or rectangular longpath cells up to 50mm long. For data output, use the built-in RS232C interface or the built-in Centronics printer port. Spectrophotometer S6018-2 includes an internal 20-column printer to record printed data. Programmed languages include English, Spanish, French, Czech, Portuguese and German. Includes dust cover, operator's manual and five disposable cuvettes.



#### Specifications:

##### Wavelength

Range ..... 325 to 1100nm  
Accuracy..... ±2.0nm  
Repeatability ..... ±0.5nm  
Spectral bandwidth ..... 8nm

##### Photometric

Readout ..... Abs, %T, Conc, Factor  
Range ..... -0.1 to 2.5Å 0 to 125%T; 0 to 1999C  
Accuracy..... 0.003Å (from 0 to 0.3Å); 1% of reading (from 0.3 to 2.5Å)

| Cat. No. | Mfr. No. | Description                             | Qty. |
|----------|----------|---|------|
| S6018-1  | 4001-000 | Spectrophotometer                       | 1/ea |
| S6018-2  | 4004-000 | Spectrophotometer with internal printer | 1/ea |

### Thermo Scientific SPECTRONIC® 20D+

THERMO SCIENTIFIC - This spectrophotometer is durable and easy-to-use. Unit covers the entire wavelength range of 340 to 950nm and filters can be changed with the push of a lever. There is no need to construct standard curves for each analysis. Just set the concentration with a standard, place the unknown sample in the instrument and read the concentration on the display. If no standard is available, simply input the factor. The unit's sample compartment holds a variety of adapters, cuvettes and test tubes for running a diverse range of chemical tests. Features an easy-to-read digital display and built-in print control.



#### Specifications:

Wavelength range ..... 340 to 950nm  
Accuracy..... ±2.5nm near 525nm  
Spectral slit width..... 20nm  
Stray radiant energy..... <0.5% T over entire wavelength range

| Cat. No. | Mfr. No.   | Description       | Qty. |
|----------|------------|-------------------|------|
| S6011-12 | 333183-000 | Spectrophotometer | 1/ea |

### Advanced® BR2 Bilirubin STAT-Analyzer®

ADVANCED INSTRUMENTS - The Advanced BR2 Stat-Analyzer system provides fast, accurate results for both total and direct bilirubin levels in neonates using only a 30µL serum or plasma sample. It determines total bilirubin by spectrophotometric analysis and direct bilirubin using a modified version of the proven Malloy-Evelyn method. Because of its accurate results, compact design and ease of use, it is ideally-suited for pediatric physician offices, satellite labs, hospital stat labs or pediatric research laboratories. Both the total bilirubin test kit and total and direct bilirubin test kit contain reagents and cuvettes for 100 determinations.



#### Specifications:

Sample size ..... 30µL  
Resolution ..... 0.1mg/dL  
Range ..... 0 to 30mg/dL  
Repeatability ..... ±2mg/dL (1SD)  
Dimensions (H x W x D)..... 7 x 11 x 13 in.  
Power requirements ..... 100 to 130VAC, 60Hz or 200 to 250V, 50Hz

| Cat. No. | Mfr. No. | Description   | Qty.   |
|----------|----------|---|--------|
| B5900-2A | BR2      | Photometer  | 1/ea   |
| B5900-12 | B2A800   | Disposable cuvettes                                 | 100/pk |
| B5900-3  | B2A101   | Total bilirubin test kit for 100 samples            | 1/ea   |
| B5900-4  | B2A102   | Total and direct bilirubin test kit for 100 samples | 1/ea   |

## If you don't see what you are looking for ... contact us.

If you don't see the product you are looking for, just pick up the phone and ask your sales or customer service representative to assist you. Visit our website at [cardinalhealth.com](http://cardinalhealth.com) for more information.

Customer Service: 800.964.5227

# General Lab

## Miscellaneous



### AnthroBench Utility Benches

ANTHRO CORP - These strong utility benches are ideal for extremely heavy loads of equipment, such as medical testing systems (hold up to 500 lbs.). Each bench includes two vertical legs with integrated cable management and a baked-on silver metallic powder coat finish. They also feature a 1.5 in. thick 45 lbs. industrial-grade particleboard shelf with high-pressure, scratch-resistant light gray laminate; two 2.5 in. base tubes; two 1.75 in. cross tubes and four 5 in. locking casters. Benches are shipped unassembled with all the tools needed to build. Dimensions (H x D): 35.5 x 28 in.

| Cat. N.  | Mfr. No.     | Description | Qty. |
|----------|--------------|-------------|------|
| L5011-91 | UB6035SM/LG5 | 60 in.      | 1/ea |
| L5011-92 | UB7235SM/LG5 | 72 in.      | 1/ea |



### Azer Revolve Countertops

AZER SCIENTIFIC - These countertops are designed to provide safe and efficient movement of your benchtop equipment during standard maintenance and cleaning. Designed to support over 1,000 lbs., they can also be customized to fit your lab's individual needs.

| Cat. No. | Mfr. No. | Description  | Qty. |
|----------|----------|--------------|------|
| ESR3100  | ESR3100  | 31 in. width | 1/ea |
| ESR4000  | ESR4000  | 40 in. width | 1/ea |



### FreeZone® 1L Benchtop Freeze Dry System

LABCONCO - This freeze dry system features an upright, stainless steel collector coil and chamber that can remove 1L of water in 24 hrs. and holds 1L of ice before defrosting. Easy-to-read LCD shows system set-up and operating parameters. System can be set for automatic or manual mode. When automatic mode is selected, simply turn on the main power switch to automatically begin the collector cool down and vacuum pull-down sequence. Manual mode begins collector cool down when main power switch is turned on, but the vacuum pump must be turned on manually. A CFC-free refrigeration system provides rapid cooling and a condensing module cools the collector coil to -50°C, making these units ideal for freeze drying aqueous samples.

Constructed of durable powder-coated steel with brushed stainless steel front panel, system features an acrylic lid with 3 in. dia. attachment port for connection of drying accessories (sold separately), a small footprint and four rubber feet for sturdy placement on a countertop or laboratory cart. The collector drain hose is accessible from the left side for easy disposal of defrosted material. The rear-mounted ¾ in. O.D. vacuum connector extends vertically to save space and a rear-mounted electrical receptacle permits connection of vacuum pump (sold separately). Three feet of ¾ in. I.D. vacuum hose and two clamps are included. A three-wire cord with 20A NEMA plug is factory wired. ETL and CE listed. Overall dimensions (W x D x H): 12.6 x 17.9 x 16.9 in. System requires the use of a vacuum pump with a displacement of at least 86L/min., drying accessory and freeze dry glassware (if not bulk freeze drying).

| Cat. No. | Mfr. No. | Description                                     | Qty. |
|----------|----------|---|------|
| L5218-33 | 7740020  | With stainless steel collector coil and chamber | 1/ea |



### FreeZone® 6L Benchtop Freeze Dry System

LABCONCO - This 6L benchtop freeze dry system includes an upright, stainless steel collector coil that can remove 4L of water in 24 hrs. and hold 6L of ice before defrosting. With four rubber feet for sturdy placement on top of a counter or lab cart, system utilizes a  $\frac{3}{4}$  hp CFC-free refrigeration system to cool collector to  $-50^{\circ}\text{C}$ , making it ideal for freeze drying aqueous samples. Collector cool-down and vacuum pull-down sequence can be started with one touch of the automatic start-up switch. Manual override switches are also included for manual refrigeration and vacuum. Relative system vacuum and collector temperature are displayed by vacuum and temperature graphs. Amber LED "waves" light up when vacuum and temperature levels are out of range for adding samples; green LED lights indicate safe conditions for adding samples.

Constructed of brushed stainless steel and glacier white powder-coated steel, systems feature an LCD that shows system operating parameters, set-up parameters and alarm messages. It can be user-configured to display vacuum in millibar, Pa or torr and temperature in  $^{\circ}\text{F}$  or  $^{\circ}\text{C}$ . Safety features include a red alarm light that flashes along with a beeping sound to warn you that an abnormal system event has occurred and a sensor that protects the vacuum pump by helping to prevent refrigeration or vacuum startup if moisture is detected in the collector chamber area. In addition, a vacuum control valve maintains set-point vacuum level and a vacuum break valve protects the system from oil back streaming by bleeding air into the system when power is shut off.

The 3 in. dia. attachment port simplifies connection of drying accessories (sold separately) and a rear-mounted  $\frac{3}{4}$  in. O.D. vacuum connection extends parallel to the back of the unit to save space. Systems are supplied with 3 ft. of  $\frac{3}{4}$  in. I.D. vacuum hose and two clamps to connect vacuum pump (not included) to the rear-mounted electrical receptacle. Other features include a rear-mounted RS232 port to transmit data to a user-supplied computer and a 9 in. retractable collector drain hose accessible from the left side for easy disposal of defrosted material. System is factory wired with a three-wire cord with 20A NEMA plug. UL, ETL and CE listed. Overall dimensions (W x D x H): 31.8 x 28.1 x 14.5 in. Stoppering tray dryer option allows samples to be pre-frozen, lyophilized and stoppered under vacuum. It accommodates batches of serum bottles, vials or ampules and can also be used with trays for bulk freeze drying. Overall dimensions for systems with stoppering tray dryer (W x D x H): 32 x 31.1 x 40.6 in. Systems require the use of vacuum pump with displacement of at least 144L/min., drying accessory (except systems with stoppering tray dryer) and freeze dry glassware (if not bulk drying), all available separately.

| Cat. No. | Mfr. No. | Description                   | Qty. |
|----------|----------|-------------------------------|------|
| L5218-81 | 7752020  | 6L benchtop freeze dry system | 1/ea |



### FlaskScrubber® Glassware Washers

LABCONCO - These washers, with type 304 brushed stainless steel exteriors and interiors, sanitize glassware with water that reaches  $180^{\circ}\text{F}$  ( $82^{\circ}\text{C}$ ) on 115V models and  $199^{\circ}\text{F}$  ( $93^{\circ}\text{C}$ ) on 230V models.

#### Features:

- LCD for customizing cycles, monitoring water temperature and cycle progress
- Water recirculation rate of 96 gallon/minute (363L/minute) on 115V and 230V 50Hz models and 112 gallon/minute (424L/minute) on 230V 60Hz models for thorough cleaning
- Dual pumps, one for washing and one for draining, to reduce cross-contamination potential
- Built-in deionized water pump to bring non-pressurized or pressurized deionized or purified water into the chamber for up to six pure water rinses
- Steam generation that produces hot vapor to penetrate and remove dried residue for cleaner glassware
- Manual-fill detergent dispenser for powder or liquid detergent
- Seven pre-set cycles including RINSE ONLY, PLASTIC, GLASS, GLASS PLUS, SCIENTIFIC, SCIENTIFIC PLUS, (230V unit includes three additional cycles of INTENSE, INTENSE PLUS and EXTREME)
- Two user-set cycle programs
- User-set delayed start of up to 8 hours
- Forced air-drying through spindles
- Includes lower stainless steel spindle rack with 36 detachable large spindles, 36 clips and 10 additional interchangeable small spindles
- Accommodates optional upper spindle rack or SteamScrubber upper and lower racks for washing beakers, culture tubes and other specialty glassware. Upper spindle rack and SteamScrubber racks are sold separately.

| Cat. No.            | Mfr. No. | Description   | Qty. |
|---------------------|----------|---|------|
| <b>Freestanding</b> |          |   |      |
| <b>W1852-73</b>     | 4420420  | Domestic electrical (115V, 60Hz, 16A), heats up to $180^{\circ}\text{F}$ ( $82^{\circ}\text{C}$ )                           | 1/ea |
| <b>Undercounter</b> |          |   |      |
| <b>W1852-74</b>     | 4420421  | Domestic/international electrical (208/230V, 50/60Hz, 12A), high heats up to $199^{\circ}\text{F}$ ( $93^{\circ}\text{C}$ ) | 1/ea |
| <b>W1852-69</b>     | 4420320  | Domestic electrical (115V, 60Hz, 16A), heats up to $180^{\circ}\text{F}$ ( $82^{\circ}\text{C}$ )                           | 1/ea |

# General Lab

## Miscellaneous



### SteamScrubber Glassware Washers

LABCONCO - These washers, with type 304 brushed stainless steel exteriors and interiors, sanitize glassware with water that reaches 180°F (82°C) on 115V models and 200°F (93°C) on 230V models.

#### Features:

- LCD for customizing cycles, monitoring water temperature and cycle progress
- Water recirculation rate of 96 gallon/minute (363L/minute) on 115V and 230V 50Hz models and 112 gallon/minute (424L/minute) on 230V 60Hz models for thorough cleaning
- Dual pumps, one for washing and one for draining, to reduce cross-contamination potential
- Built-in deionized water pump to bring non-pressurized or pressurized deionized or purified water into the chamber for up to six pure water rinses
- Steam generation that produces hot vapor to penetrate and remove dried residue for cleaner glassware
- Manual-fill detergent dispenser for powder or liquid detergent
- Seven pre-set cycles including RINSE ONLY, PLASTIC, GLASS, GLASS PLUS, SCIENTIFIC, SCIENTIFIC PLUS, (230V unit includes three additional cycles of INTENSE, INTENSE PLUS and EXTREME)
- Two user-set cycle programs
- User-set delayed start of up to 8 hours
- Forced air-drying
- Includes upper and lower standard open racks of type 304 stainless steel
- Accommodates optional upper and lower spindle racks (without forced air-drying through spindles). Spindle racks are sold separately.

| Cat. No.            | Mfr. No. | Description  | Qty. |
|---------------------|----------|--|------|
| <b>Freestanding</b> |          |  |      |
| <b>W1852-65</b>     | 4400420  | Domestic electrical (115V, 60Hz, 16A) - heats up to 180°F (82°C)                       | 1/ea |
| <b>Undercounter</b> |          |  |      |
| <b>W1852-61</b>     | 4400320  | Domestic electrical (115V, 60Hz, 16A) - heats up to 180°F (82°C)                       | 1/ea |
| <b>W1852-62</b>     | 4400321  | Domestic/international electrical (230V, 50/60Hz, 12A) - high heats up to 199°F (93°C) | 1/ea |

### RapidVap® N2/48 Evaporation System

LABCONCO - This system uses nitrogen blow-down, vortex motion and heat to speed evaporation of up to 48 samples with volumes up to 26mL each. A stream of nitrogen or dry gas is directed downward onto the surface of the sample. Nitrogen blow-down helps reduce the partial pressure directly over the liquid to speed evaporation and remove the solvent as it evaporates. There are 8 clusters of 6 ports each. Nitrogen can be delivered to 2, 4, 6 or 8 clusters at once so that nitrogen is conserved when a full load is not required. Use this system to prepare samples for drug development and metabolism, bioresearch, combinatorial chemistry, environmental testing, forensics and toxicology applications.



Units feature easy-to-read LCD screen, Teflon®-coated aluminum chamber, powder-coated cast aluminum cabinet base, acrylic/PVC thermoplastic upper housing, glass lid and dual lid clamps. A phenol-free gasket provides complete sealing. There is an audible alarm with automatic shutdown for timed end point and an audible/visual alarm for end point detected by temperature sensors at heater and block. As many as nine different user-set programs, each with different parameter set points, can be stored in memory, and you can set parameters of time, heat, vortex speed and number of active nitrogen positions. All mechanical components are isolated from the chemical fumes and vapors for longer life. Dimensions with closed lid (W x D x H): 21.7 x 19 x 13.5 in. (55 x 48 x 34cm).

| Cat. No.        | Mfr. No. | Description                          | Qty. |
|-----------------|----------|--------------------------------------|------|
| <b>E5405-36</b> | 7910012  | Standard system - 115V, 50/60 Hz, 8A | 1/ea |

### Darkfield Quebec® Electronic Register Colony Counter

REICHERT ANALYTICAL INSTRUMENTS - A built-in electronic register in this colony counter automatically records count in open or closed petri dishes. In open dishes, when ground and counting probes are both touching conductive agar, the electrical circuit is completed and digital counter activated. Each probing action is automatically counted. An electronic marking pen is available for counting closed petri dishes. Each time the pen tip is depressed, a microcircuit in the pen's barrel is completed and the counter is activated.



An automatic reset provides immediate zeroing of the five-digit counter. Each unit is complete with a Wolffhuegel counting plate, counting probe with magnetic ground and an adjustable dish holder. The tilt leg may be mounted in front or back, providing a convenient angle for reading. Dimensions (H x W x L): 10 x 11 x 10½ in. UL listed, CSA certified.

| Cat. No.       | Mfr. No. | Description             | Qty. |
|----------------|----------|-------------------------|------|
| <b>C8374-5</b> | 13332700 | 110V/50Hz with USA cord | 1/ea |

### Goldberg Ultraprecision Brix Handheld Refractometer

REICHERT ANALYTICAL INSTRUMENTS - This refractometer measures percent solids (Brix) in water-soluble solutions on a 0° to 30° scale. It provides high-end precision refractometry in a handheld model and produces Brix better than 0.1%. The refractometer features automatic temperature compensation that provides accurate readings without correction tables or temperature measurement. All optics and instrument scales are permanently sealed inside shock- and damage-resistant bodies. The refractometer also has magnified scales with easy-to-read markings and divisions to allow true readings and accurate results with every use.



#### Specifications:

Range ..... 0% to 30% Brix  
Accuracy ..... ±0.1%  
Refractive index ..... 1.3330 to 1.3811

| Cat. No. | Mfr. No. | Description            | Qty. |
|----------|----------|------------------------|------|
| R3612    | 13104230 | Handheld refractometer | 1/ea |

### High Precision TS400 Clinical Refractometer



REICHERT ANALYTICAL INSTRUMENTS - The Reichert TS400 is a high performance handheld clinical refractometer that determines urine specific gravity, protein concentration in plasma or serum and total solids in other aqueous solutions. It is designed specifically for clinical, chemistry and classroom laboratories.

Automatic temperature compensation provides accurate readings without correction tables or temperature measurement. Instant results with just a drop of sample. Simply place sample on the prism, hold the unit perpendicular to a light source and look into the eyepiece. Easy-to-read scale and a 10x focusable eyepiece optimizing image resolution and viewing. Highly visible, bright, blue shadowline. Small sample required—just 0.01mL.

| Cat. No. | Mfr. No. | Description            | Qty. |
|----------|----------|------------------------|------|
| R3631-14 | 13740000 | Clinical refractometer | 1/ea |

### Triple Scale Goldberg Ultraprecision Total Solids (TS) Meter



REICHERT ANALYTICAL INSTRUMENTS - Use this TS meter to determine specific gravity of urine, concentration in serum or plasma and total solids in other aqueous solutions. A small 0.002mL sample is all that is needed for fast, accurate results. This handheld refractometer is portable; no batteries or power cords are necessary. Automatic temperature compensation between 65°F and 95°F. Exclusive liquid-filled prism technology enables accuracy comparable with laboratory refractometers. CSA certified.

#### Specifications:

##### Ranges

Urine specific gravity ..... 1.000 to 1.035  
Protein concentration ..... 2.5 to 15g/100mL  
Refraction ..... 0 to 320

| Cat. No. | Mfr. No. | Description | Qty. |
|----------|----------|-------------|------|
| B5996-1  | 1310400A | TS meter    | 1/ea |

To order, call: 800.964.5227

[cardinalhealth.com](http://cardinalhealth.com)

### Rhino IFT 40 Industrial Fluid Tester



REICHERT ANALYTICAL INSTRUMENTS -

Quickly and accurately determine the ratio or concentration of water-soluble industrial fluids using this handheld refractometer. No batteries or power cord are required, making it very portable. For use in a variety of settings, including chemical, pharmaceutical, clinical or auto/vehicle services, this device offers automatic temperature compensation, which provides accurate readings without correction tables or temperature measurement.

The refractometer has large, easy-to-read scales and depth of field as well as a chemical-resistant polycarbonate housing and double-cemented glass optics. Its scale has blue painted prisms to further aid in visibility. Both housing and eyepiece are sealed, making them IP67-resistant to water and dust and the housing's black color helps reduce stray light, which is designed to improve the overall quality of the image.

#### Specifications:

Range ..... 0 to 30  
Scale divisions ..... 0.5  
Refractive index (nD) ..... 1.3330 to 1.3860  
Calibration liquid ..... Distilled water

| Cat. No. | Mfr. No. | Description             | Qty. |
|----------|----------|-------------------------|------|
| 7540     | 13754000 | Industrial fluid tester | 1/ea |

### TS Meter-D Digital Handheld Refractometer



REICHERT ANALYTICAL INSTRUMENTS - This refractometer is designed to automatically read your samples with precision comparable to high-end automatic refractometers. Its simple, three-button, fully automatic operation makes it easy for any operator to obtain fast, accurate results. Sapphire prism delivers 4X more durability than glass. The refractometer helps to reduce operator error since operator interpretation of unclear shadowlines is no longer necessary. It also has an accuracy of ±0.0001 refractive index to help ensure you get the right result every time. The refractometer can read all sample types, including transparent, translucent and opaque liquids. It has four scales built in: 1.000 to 1.060 urine specific gravity (±0.001), 0.0 to 15.0g/100mL serum protein (±0.1), 1.0000 to 1.200 copper sulfate specific gravity (±0.001) and 1.3300 to 1.5600 refractive index (±0.0001). Powered by four AAA batteries. Battery life: more than 3,000 readings.

| Cat. No. | Mfr. No. | Description                    | Qty. |
|----------|----------|--------------------------------|------|
| R3631-4  | 13960000 | Digital handheld refractometer | 1/ea |

# General Lab

## Miscellaneous/Mixers

### Unistat® Bilirubinometer

REICHERT ANALYTICAL INSTRUMENTS -

Designed to quickly measure total serum bilirubin concentration in newborn infants, this bilirubinometer displays results within 5 seconds. Point-of-care test for all ethnicities. The unit requires only 20 $\mu$ L of undiluted whole serum. Simply place your sample in a disposable plastic cuvette and insert it into the sample chamber. Push a button and the results are displayed on a large LED display. Accuracy comparable to diazo Jendrassik-Groff and HPLC method. Complete with calibration and high-level check cuvettes, reference manual, box of 51 disposable cuvettes, replacement lamp and three-wire cord with grounded plug. Operates on 120VAC, 50/60 Hz cETLus, CE approvals.



| Cat. No. | Mfr. No. | Description         | Qty.  |
|----------|----------|---------------------|-------|
| B5905-1C | 1310310C | Bilirubinometer     | 1/ea  |
| B5905-2A | 13102140 | Disposable cuvettes | 51/pk |

### Thermo Scientific MaxiMix® I Vortex Mixer

THERMO SCIENTIFIC - Ideal for enzymatic and RIA assays, general test

tube mixing, biochemical assays, viral dilution preparations, precipitated assays, cell suspension vortexing and tissue sample mixing. Excellent for single and multiple tubes and small flasks with closed tops.

- Fast, uniform mixing in continuous operation or touch-on mode
- Simultaneously mixes up to four test tubes
- Push-button top-mounted ON/OFF switch
- Vary vortex mixing by simply changing pressure of tube against foam rubber top
- Cast-aluminum base with suction-cup rubber feet provides maximum stability
- Compact design with 4 in. diameter (10.2cm) foam rubber top



#### Specifications:

Speed range ..... 3,000 rpm

Platform, foam pad ..... 4 in. (10.1cm)

Exterior L x W x H ..... 5.5 x 5.5 x 4.2 in. (13.9 x 13.9 x 10.6cm)

| Cat. No. | Mfr. No. | Description  | Qty. |
|----------|----------|--------------|------|
| M16715Q  | M16715Q  | Vortex mixer | 1/ea |

### Thermo Scientific MaxiMix® II Vortex Mixer

THERMO SCIENTIFIC - Excellent for

mixing media in test tubes, mixing cytogenetic suspensions in centrifuge tubes, vortexing cell suspensions and vortexing drug extractions. Ideal for enzymatic and RIA assay applications, atomic absorption sample preparation and Nelson's assay for reducing sugars.

- Continuous-run or touch-activated run modes
- Simultaneously mixes contents of up to four test tubes or small flasks with closed tops
- White, durable plastic housing resists acids and alkalines
- Heavy-duty cast metal base with rubber feet assures stability and helps eliminate creep during use
- With two mixing devices: rubber single-cup tube holder and foam pad for mixing flasks or multiple tubes simultaneously



#### Specifications:

Speed range ..... 100 to 3,000 rpm

Platform, foam pad/cup ..... Pad: 3.5 in. (8.8cm); cup: 1 in. (2.5cm)

Exterior L x W x H ..... 7 x 4.5 x 6 in. (17.7 x 11.4 x 15.2cm)

| Cat. No. | Mfr. No. | Description  | Qty. |
|----------|----------|--------------|------|
| M37615Q  | M37615Q  | Vortex mixer | 1/ea |

### Thermo Scientific MaxiMix® III Vortex Mixer

THERMO SCIENTIFIC - Choose the MaxiMix® III mixer with its distinct, interchangeable holders to handle a complete range of laboratory mixing needs. Versatility of speed selection is ensured through precise matching of an electronic speed control to a high torque DC motor drive.

Rotary shaker combines a heavy cast-aluminum base with a counterbalance system to help eliminate creeping

and walking of the unit, even when mixing a large volume. The springs in the legs are short, improving the stability of the unit at high speeds. Permanently lubricated, ball bearing motor and drive system guarantee for continuous trouble-free operation of loads up to 5 lbs. (2.2kg).



A lighted on/off switch indicates when the shaker is in operation.

The interchangeable holders for holding a variety of vessels can be mounted or removed in seconds with the unit's three-point fastening system. Soft rubber plate for vortexing tubes is included.

#### Specifications:

Ambient temperature range ..... 5° to 40°C

Operating speed ..... 100 to 2,200 rpm

Relative humidity ..... 0% to 80%

Mixing surface ..... (W x L) 6.25 x 5.5 in.

Overall (W x H x D) ..... 6.50 x 5.13 x 8.5 in.

| Cat. No. | Mfr. No. | Description  | Qty. |
|----------|----------|--------------|------|
| S8249-2  | M65825   | Vortex mixer | 1/ea |

### Thermo Scientific Speci-Mix™ Mixer

THERMO SCIENTIFIC - This precision-controlled platform mixer provides a smooth rocking motion for consistently uniform specimen suspension. Features a preset 18 rpm motor speed and a preset 48° angle mixing zone. The reversible pad features one side for capped tubes 110mm long while the opposite side accommodates longer tubes. A white silicone rubber friction grip pad contrasts specimens and labels for easy viewing. Capped tubes can be easily loaded or unloaded without turning off the mixer. Include three-wire cord and plug.



#### Specifications:

Operating speed ..... 18 rpm  
Capacity ..... 8 tubes: 10 to 20mm; 3 tubes: 22 to 30mm  
Mixing surface (D x W) ..... 4½ x 6 in.  
Dimensions (W x H x D) ..... 7½ x 4.3 x 5½ in.

| Cat. No. | Mfr. No. | Description     | Qty. |
|----------|----------|-----------------|------|
| R4189-2  | M71015Q  | Half-size mixer | 1/ea |



### Thermo Scientific Vari-Mix™ Test Tube Mixer

THERMO SCIENTIFIC - The adjustable-speed motor of this mixer lets you choose from 2 to 20 rpm. Adjustable mixing platform of 1° to 48° angle. The precision-controlled platform mixer helps ensure smooth rocking action for consistently uniform specimen suspension. The reversible pad provides one side for capped tubes 110mm long (lip on end of pad prevents tubes from sliding) and another side for longer tubes. A friction-grip white silicone rubber pad creates a contrast between specimens and labels for easy viewing. Load and unload capped tubes easily without turning off mixer. The mixer is compact, attractive and easy to clean. The exterior case is protected by a baked-on enamel finish.

#### Specifications:

Operating speed ..... 2 to 20 rpm  
Capacity ..... 16 tubes: 10 to 20mm; 7 tubes: 22 to 30mm  
Mixing surface (W x L) ..... 4.5 x 12.0 in.  
Dimensions (W x H x D) ..... 15.0 x 4.25 x 5.5 in.

| Cat. No. | Mfr. No. | Description     | Qty. |
|----------|----------|-----------------|------|
| R4188-1  | M48725Q  | Test tube mixer | 1/ea |



### GyroMini™ 3-D Nutating Mixer

AZER SCIENTIFIC - This mixer combines the actions of an orbital shaker with a rocker to provide gentle and thorough 3-D mixing without foaming. Ideal for use with blood and centrifuge tubes and for resuspending large, fragile DNA fragments. Mixer has a fixed 20° pitch and can hold a maximum load of 1.75 lbs. Supplied with a dimpled mat to hold tubes in place. Fixed speed and pitch. Safe for cold room use.

#### Specifications:

Maximum speed ..... 24 rpm  
Temperature range ..... Ambient 4° to 65°C  
Power requirements ..... 120V, 60 Hz

#### Dimensions

Platform ..... 9.5 x 6.75 in.  
Overall (W x D x H) ..... 9.5 x 6.75 x 6 in.

| Cat. No. | Mfr. No. | Description    | Qty. |
|----------|----------|----------------|------|
| ESS0500  | ESS0500  | Nutating mixer | 1/ea |

### Vortex Mixer

AZER SCIENTIFIC - This vortex mixer provides smooth instant vortexing of even the largest sample sizes, including full 50mL tubes. Variable speed control from 0 to 2,500 rpm. The unique counter balance system creates maximum vortexing action, while minimizing noise and excessive vibration. This results in quieter, more efficient and longer-lasting operation.



#### Specifications:

Maximum speed ..... 2,500 rpm  
Operation mode ..... Touch or continuous  
Dimensions ..... 5 x 5 x 6 in.  
Electrical ..... 115V~, 60 Hz

| Cat. No. | Mfr. No. | Description  | Qty. |
|----------|----------|--------------|------|
| ES3362   | ES3362   | Vortex mixer | 1/ea |

# General Lab

## Mixers

### BD Adams™ Nutator Mixer (120V)

BD DIAGNOSTICS - The BD Adams™ Nutator Mixer is a laboratory aliquot shaker for keeping or resuspending colloidal mixtures in a uniform suspension. The Nutator provides continuous mixing action and maintains the homogeneous suspension of blood cells in collection tubes prior to the dilution of specimens for testing in blood cell counters.



The Nutator and specimen tray can accommodate the following numbers and types of containers:

- 15 each: 7mL, 10mL or 15mL blood collection tubes
- 24 each: pediatric blood collection tubes
- 16 each: UNOPETTE® Disposable Diluting Pipettes
- 16 each: serum bottles

Larger containers, up to 1¾ lbs. maximum in weight, can also be accommodated.

#### Specifications:

Dimensions (Dia. x H x D) ..... 5½ x 9½ x 5¾ in.

Power requirements ..... 120V, 60 Hz

| Cat. No. | Mfr. No. | Description             | Qty. |
|----------|----------|-------------------------|------|
| R4187-7  | 421105   | BD Adams™ Nutator Mixer | 1/ea |

### Tap Dancer Mini Vortex Mixer

BOEKEL - This compact mixer features a low profile and small footprint, a pressure-sensitive cup, continuous or touch operation capabilities and rubber suction pads to prevent walking and absorb vibration. It uses a low-voltage supply, which makes it safe for cold room use.



#### Specifications:

Speed ..... 300 to 3,000 rpm

Orbit ..... 2mm

Maximum tube diameter ..... 20mm

Dimensions (W x D x H) ..... 3¼ x 5¾ x 3 in.

Power requirements ..... 12V, 0.5A

| Cat. No. | Mfr. No. | Description       | Qty. |
|----------|----------|-------------------|------|
| S8250-4A | 270100   | Mini vortex mixer | 1/ea |

### Turbo Mixer

LW SCIENTIFIC - This turbo mixer features variable speed control, continuous operation and suction-cupped feet. Soft, rubber cup head is for single tube mixing. Maximum speed: 3,000 rpm.



| Cat. No. | Mfr. No.      | Description | Qty. |
|----------|---------------|-------------|------|
| R4199-1  | MXL-TMV7-7RC1 | Turbo mixer | 1/ea |

### Multitube Vortexers

TROEMNER - Used for vortexing cell suspension, mechanical and chemical cell lysis, mixing cytogenetic suspensions and general mixing, these vortexers hold multiple test tubes. Choose timed or continuous operation and mix up to 50 samples at one time. When vessels are inserted into the unit, the top of the vessel is secured, allowing the bottom to move freely in a defined eccentric orbit. You can easily remove samples from the tray. Attached suction cup feet on the bottom of the unit help prevent sliding. Operating conditions: 18°C to 33°C (64°F to 91°F), 20% to 85% relative humidity. Digital vortexer TR-945065 features a microprocessor controller that is ideal for applications that require accuracy and repeatability. Digital vortexers feature easy-to-read LED displays for speed and time and a programmable timer. You can set the speed range in 25 rpm increments. Programmable pulsing mode allows user to adjust the pulse on and pulse off times from 1 to 59 seconds. One 12mm diameter tube rack is included with each vortexer.



#### Specifications:

Capacity ..... 10 lbs.

Orbit diameter ..... 3.6mm

Power requirements ..... 120V, 50/60 Hz, 5A, 75W

#### Operating speed

Analog units ..... 1,200 to 2,400 rpm

Digital units ..... 500 to 2,500 rpm

#### Timer

Analog units ..... 1 to 60 seconds

Digital units ..... 1 second to 9,999 minutes

| Cat. No.  | Mfr. No. | Description      | Qty. |
|-----------|----------|------------------|------|
| S8284-1   | 945007   | Analog vortexer  | 1/ea |
| TR-945065 | 945065   | Digital vortexer | 1/ea |

### Talboys Advanced Vortex Mixer

TROEMNER - This mixer is ideal for applications that demand repeatable results. Features touchpad controls and LED displays for accurate speed (rpm) and time (minute/second) results. Microprocessor feedback control maintains set speed for strong, consistent mixing action. Timer will display elapsed time or, when programmed to a user-defined time limit, the unit will shut off when time reaches zero. Mixer features two modes of operation: continuous mode when using accessory attachments or touch mode, which activates mixing when depressing the cup head. Mixer includes a cup head and 3 in. head with cover.



#### Specifications:

Speed range ..... 500 to 3,000 rpm

Dimensions (W x D x H) ..... 4 x 8 x 5.5 in.

Power requirements ..... 120V, 50/60 Hz, 150W

| Cat. No.  | Mfr. No. | Description  | Qty. |
|-----------|----------|--------------|------|
| TR-945603 | 945603   | Vortex mixer | 1/ea |

### Talboys Basic Vortex Mixers

TROEMNER - These basic vortex mixers are touch units designed for high-speed mixing. They start mixing when the cup head is pressed down. The speed is fixed at full rpm to create a vigorous vortex. Each mixer includes a cup head and a 3 in. head with cover.



#### Specifications:

Speed ..... 3200 rpm  
 Dimensions (W x D x H) ..... 4.8 x 6.8 x 4.8 in.  
 Power requirements ..... 120V, 50/60 Hz, 150W

| Cat. No.         | Mfr. No. | Description | Qty. |
|------------------|----------|-------------|------|
| <b>TR-945610</b> | 945610   | Basic mixer | 1/ea |

### Talboys Pulsing Vortex Mixer

TROEMNER - This mixer features powerful, pulsing vortex action that produces excellent cell disruption for glass bead procedures. Capable of complete cell disruption of samples in only minutes. The pulsing action reduces heat generation while providing more effective mixing and disruption. System includes an easy-to-load holder for 12 x 1.5 or 2mL microcentrifuge tubes. Microtube holder has a built-in cup head that allows mixer to be used as a standard vortex mixer in touch mode.



Microprocessor feedback control maintains set speed for strong, consistent mixing action. LED digital displays for both speed (rpm) and time (minute/second) help to provide better repeatability and accuracy than an analog unit. Displayed time counts up during continuous operation and counts down during timed runs.

#### Specifications:

Speed range ..... 500 to 3,000 rpm  
 Dimensions (W x D x H) ..... 4 x 8 x 5.5 in.  
 Power requirements ..... 120V, 50/60 Hz, 150W

| Cat. No.         | Mfr. No. | Description          | Qty. |
|------------------|----------|----------------------|------|
| <b>TR-945620</b> | 945620   | Pulsing vortex mixer | 1/ea |

### Talboys Standard Vortex Mixers

TROEMNER - These mixers have a variable speed and analog control that allows low rpm startup for gentle shaking or high-speed mixing for vigorous vortexing of samples. They have two modes of operation: continuous mode when using accessory attachments or touch mode, which activates mixing when depressing the cup head. Each mixer includes a cup head and 3 in. head with cover.



#### Specifications:

Speed ..... 300 to 3200 rpm  
 Dimensions (W x D x H) ..... 4.8 x 6.8 x 4.8 in.  
 Power requirements ..... 120V, 50/60 Hz, 150W

| Cat. No.         | Mfr. No. | Description    | Qty. |
|------------------|----------|----------------|------|
| <b>TR-945600</b> | 945600   | Standard mixer | 1/ea |



### Rock-IT™ Tube Mixer

UNICO - This heavy-duty tube mixer provides smooth and gentle movement at 25 rpm to assure a uniform, thoroughly mixed specimen, while preserving the integrity of the fragile blood cells. It will also get hematology controls ready to use in no time for accurate results. The oversized platform will accommodate larger and hard-to-mix tubes. The mixer is a compact size that uses minimal benchtop space.

It features a nonslip, reversible and autoclavable tube pad made of silicone rubber.

#### Specifications:

Maximum capacity ..... 15 x 120mm tubes  
 Maximum speed ..... 25 rpm

| Cat. No.          | Mfr. No.   | Description                     | Qty. |
|-------------------|------------|---------------------------------|------|
| <b>L-TTR200</b>   | L-TTR200   | 15-place tube rocker            | 1/ea |
| <b>L-TTR200-1</b> | L-TTR200-1 | Replacement tube pad - 15-place | 1/bx |



### Rocker II™ Model 260350

BOEKEL - Accepts a wide variety of flasks, plates and tubes. Adjust tilt angle and speed without the need for tools. Supplied with flat non-skid mat. 2-year warranty. Applications include gel staining and destaining; Northern, Southern and Western blots; mixing test tubes and rocking agglutination card. Power Pac is UL, CSA and CE approved.

#### Specifications:

Load capacity ..... 2.7kg (6 lbs.)  
 Adjustable tilt angle ..... 0° to 20°  
 Adjustable speed ..... 3-25 rpm  
 Temperature range ..... 4°C to 40°C  
 Dimensions with platform (W x D x H) ..... 12 x 12 x 7 in.

| Cat. No.      | Mfr. No. | Description | Qty. |
|---------------|----------|-------------|------|
| <b>260350</b> | 260350   | Rocker      | 1/ea |

# General Lab

## Rockers/Rotators



### LW-100 Blood Rocker

LW SCIENTIFIC - Gently rock blood sample tubes and small vials with this rocker. The gentle motion helps provide mixing without damage to fragile cell suspensions. It features a space-saving design. It also includes a washable tube pad.

#### Specifications:

Operating speed ..... 24 cycles per minute  
 Capacity ..... 16 tubes  
 Dimensions ..... 4 x 13½ x 5¼ in.

| Cat. No. | Mfr. No.      | Description         | Qty. |
|----------|---------------|---------------------|------|
| R3401-1  | MXL-BLF7-16T1 | LW-100 blood rocker | 1/ea |

### Thermo Scientific Cellgro® Tissue Culture Rotators

THERMO SCIENTIFIC - These rotators feature variable speed and adjustable angle rotation to give you optimum culture results in applications such as growth of tissues and viruses, hormone production from selected tissues and sample testing for the presence of viruses and cytotoxicity assays. Constructed of durable powder-coated stainless steel, the rotators operate in standard incubators for cultivation under controlled temperature conditions up to 40°C and humidity conditions from 20% to 80% noncondensing. Drums can be lifted off rotors without interrupting operation of the units. Choose from single- or dual-drum configuration. Rotator T4100-33 holds one drum, while rotator T4100-1A holds two drums.

#### Specifications:

#### T4100-33 single drum

Rotating angle ..... Adjustable 5° above horizontal to 90°  
 Speed range ..... 12 to 70 rpm  
 Tube capacity ..... 142–16mm tubes; 76–25mm tubes;  
 60–30mm tubes

#### T4100-1A dual drum

Rotating angle ..... Nonadjustable  
 Speed range ..... Fixed 0.2 rpm  
 Tube capacity ..... 284–16mm tubes; 152–25mm tubes;  
 120–30mm tubes

| Cat. No. | Mfr. No. | Description | Qty. |
|----------|----------|-------------|------|
| T4100-33 | 1640Q    | Single drum | 1/ea |
| T4100-1A | 1645Q    | Dual drum   | 1/ea |



### Thermo Scientific Lab-Line™ Lab Rotators

THERMO SCIENTIFIC - These rotators are ideal for general rotation of many types and sizes of vessels including glass trays, vials, petri dishes and test tube racks. Designed for molecular biology, immunology and clinical applications, rotators feature a special drive mechanism for stability and quiet operation and a continuous-duty motor that provides quiet, smooth rotation through a 0.75 in.-diameter orbit.

Operating continuously in temperatures of 4°C to 40°C, units can be used in a variety of environments including refrigerators, incubators, warm rooms and environmental chambers. They achieve gentle to vigorous agitation with variable speeds from 40 to 220 rpm, adjustable with a rotary dial. You can operate the rotators in a continuous mode or set the timer for 1 to 60 min. for time studies. Rotators accommodate up to 10 lbs., and include an easy-to-clean white silicone platform mat that can be autoclaved. Power requirements: 120V, 0.4A, 50W. Choose 9 x 9 in. or 12 x 12 in. platform.

| Cat. No. | Mfr. No. | Description          | Qty. |
|----------|----------|----------------------|------|
| 2309     | 2309Q    | 9 x 9 in. platform   | 1/ea |
| 2314     | 2314Q    | 12 x 12 in. platform | 1/ea |



### Thermo Scientific LABQUAKE® Rotator/Rockers and Shakers

THERMO SCIENTIFIC - Variable-action LABQUAKE® shakers feature removable trays, which hold up to forty-six 10mL BD Vacutainer® tubes and/or clip bar with clips, easily interchangeable with trays, for rotating tubes. Clip bar model R4193-1 features

continuous rotation at 8 rpm or oscillating action at 22 to 70 reversals/minute. Double-deck tray models feature oscillating action at 32 to 70 reversals/minute depending on the angle. Tubes may be added or removed and trays changed without turning off the motor.



| Cat. No. | Mfr. No. | Description  | Qty. |
|----------|----------|--|------|
| R4193-1  | 400110Q  | Rotator - 14 clips for 10 to 19mm dia. tubes           | 1/ea |
| R4193-2  | 415110Q  | Rotator - 32 clips for 10 to 19mm dia. tubes           | 1/ea |
| R4193-3  | T400110Q | Shaker - double-deck trays - holds up to 22–10mL tubes | 1/ea |
| R4193-4  | T415110Q | Shaker - double-deck trays - holds up to 46–10mL tubes | 1/ea |

**Thermo Scientific Small Bidirectional Rotator**

THERMO SCIENTIFIC - Use this lightweight bidirectional rotator for serological tests. It delivers a gentle rocking motion at a 10° angle through a 360° rotation at 30 rpm. The rotator features a rugged, powder-coated steel body with a minimized footprint to conserve bench space and a white, nonskid platform that can hold up to two microwell plates, vacutainers, slides, petri dishes and tissue culture flasks. It can be set for 60 min. or continuous operation. Power requirements: 120V, 0.3A, 60W, 50/60 Hz. Platform dimensions (W x D): 6.75 x 5 in. Overall dimensions (W x H x D): 16 x 7½ x 14 in.

| Cat. No. | Mfr. No. | Description                 | Qty. |
|----------|----------|-----------------------------|------|
| S1077-10 | 4630Q    | Small bidirectional rotator | 1/ea |

**Mini LabRoller™ Rotator**

AZER SCIENTIFIC - Mix samples in both a horizontal and vertical plane with this rotator. It is incubator- and cold room-safe. The rotator's compact design helps you to conserve valuable benchtop space. Rotator features a fixed speed of 24 rpm and rotating, rocking and tumbling motions that you can adjust by changing the rotisserie position. Rotissaries are available separately to accept a variety of tube sizes. You can also use two microplates on any of the rotissaries. Unit is supplied with two pegs that you can insert to limit rotisserie position to 20°, 45° or 60° and one rotisserie for 36 x 1.5 or 2mL tubes.

**Specifications:**

Maximum speed ..... 24 rpm  
 Temperature range ..... Ambient +4°C to 40°C  
 Dimensions (W x H x D) ..... 8.4 x 4 x 5 in.  
 Power requirements ..... 120V, 50/60 Hz, 0.03A

| Cat. No.  | Mfr. No.  | Description                                     | Qty. |
|-----------|-----------|---|------|
| ESH5500   | ESH5500   | Rotator   | 1/ea |
| ESH550015 | ESH550015 | Rotissaries - 10 x 15mL tubes and 6 x 5mL tubes | 1/ea |

**Mini Orbitron™ 260100**

BOEKEL - Accommodates a variety of blood tubes, centrifuge tubes, glass vials or plates. Provides extremely quiet, gentle, continuous mixing of specimens. Low profile and small footprint minimizes bench space. Includes two white mats, one dimpled and one flat. Rubber mats can be cleaned with soap and water. Mats can be autoclaved too. 2-year warranty.

**Specifications:**

Load capacity ..... 1.8 lbs. (0.8kg)  
 Operating temperature ..... +4°C to 45°C  
 Fixed speed ..... 24 rpm  
 Tilt angle ..... 20° fixed angle  
 Dimensions (W x D x H) ..... 7½ x 5 x 5½ in.

| Cat. No.  | Mfr. No. | Description                       | Qty. |
|-----------|----------|-----------------------------------|------|
| R3301-11A | 260100   | Model 260100 - 115VAC, 2.2W, 0.2A | 1/ea |

**Orbitron Rotator**

BOEKEL - This benchtop rotator features a 12 in. square platform and an even smaller footprint to conserve your valuable bench space. It provides gentle, low-foaming agitation and uniform mixing. Applications include immunoassays, hybridizations, mixing of blood samples, coupling affinity chromatography media and DNA extractions.

Provides fixed-speed operation for 20 orbits per minute and fixed tilt of 23°. Comes with a removable dimpled pad that accepts many different sizes of tubes at once so you don't need unwieldy racks or clamps. Solid vinyl boot helps ensure long life of rotator mechanism.

**Specifications:**

Power requirements ..... 120VAC, 0.8A

**Dimensions (W x D x H)**

Rotator ..... 7½ x 7 x 5 in.  
 Rotator with platform ..... 12 x 12 x 12 in.

| Cat. No. | Mfr. No. | Description     | Qty. |
|----------|----------|-----------------|------|
| R3300-1  | 260200   | Model I rotator | 1/ea |

# General Lab

## Rotators



### Digital Serology Rotator

LW SCIENTIFIC - The serology rotator is designed to give years of dependable service, even in the busiest laboratory. It's the ideal space-saving instrument for procedures that require constant or timed rotation (mixing) such as RPR, VDRL, EIA, latex tests and for procedures that require a nonstandard speed. Comes with clear humidity tray.

#### Specifications:

Platform ..... 9 x 9 in. (230 x 230mm)  
 Orbit diameter ..... 0.8 in.  
 Speed ..... 20-240 rpm  
 Timer ..... 99 hours and 99 minute digital timer  
 Motor ..... 120VAC, 10W  
 Dimensions (H x L x W) ..... 6 x 9 x 9 in.

| Cat. No. | Mfr. No.      | Description  | Qty. |
|----------|---------------|--|------|
| R3401-2  | RTL-BLVD-24T1 | Digital rotator - variable speed, digital tachometer and timer | 1/ea |

### UNICO® Digital Rotator

UNICO - This digital rotator is a compact, durable, variable speed orbital mixer that will accommodate a wide variety of printed well slides, culture plates, flasks and small test tube racks, as well as RPR and VDRL slides or 96-well microtiter (immunoassay) plates.



- 11 x 11 in. mixing platform with a removable/replaceable rubber pad
- Humidity cover with moisturizing sponge
- Variable speed from 20 to 240 rpm
- Digital timer 0 to 99 hours 59 minutes
- Three-position switch for: constant on, off, timed mixing
- Digital time and speed display
- Load 4.4 lbs. at 20-150 rpm; 2.2 lbs. at 151-240 rpm
- Indicator bell at end of timed mixing cycle
- Small flask hold down spring

| Cat. No. | Mfr. No. | Description                  | Qty. |
|----------|----------|------------------------------|------|
| L-RT30C  | L-RT30C  | Rotator - 10.4 x 9.2 x 6 in. | 1/ea |

### Talboys Digital 3D Rotator Waver

TROEMNER - This rotator waver features precise speed control that provides smooth, low-foaming, three-dimensional "wave" motion from 1 to 30 rpm. Vertical and horizontal wave motion. Ideal for blood samples, DNA extractions, blotting techniques and general mixing of various size tubes. Designed for use in incubators, CO<sub>2</sub> incubators, cold rooms (-10°C to +60°C) and 80% relative humidity noncondensing environments. Microprocessor controls with LED displays provide accurate and repeatable results. Spill-resistant design channels fluids away from internal components. Base is constructed of durable aluminum for extra stability. Microprocessor touchpad provides electronic angle adjustment, which allows users to adjust rocking angle while unit is operating. Precise speed control provides smooth, low-speed rocking motion down to 1 rpm. For improved repeatability, onboard memory recalls last settings, even when unit is turned off. Audible and visual signals will activate when system detects an overloaded, unbalanced condition or obstruction of the tray. LED display shows elapsed time or, when programmed to user-defined limit, counts down to zero and shuts off unit. Audible alarm will sound when time reaches zero. Optional alarm mute can be set from touchpad control. Powerful, maintenance-free stepper motor handles heavy loads up to 5 lbs. (2.3kg) and provides a long service life.



#### Specifications:

Tilt angle ..... 0° to 20°  
 Timer ..... 1 second to 160 hours  
 Maximum capacity ..... 5 lbs.

#### Speed

Range ..... 1 to 30 rpm  
 Accuracy ..... ±1%

| Cat. No. | Mfr. No. | Description                                      | Qty. |
|----------|----------|--|------|
| TR980537 | 980537   | Rotator waver 120V - 11 3/4 x 8 3/4 in. platform | 1/ea |



### Thermo Scientific MaxQ™ 2000 Benchtop Orbital Shakers

THERMO SCIENTIFIC - The MaxQ™ 2000 open-air platform shakers are durable and easy to use. Paired with a variety of platform sizes for increased sample capacity, they are ideally suited for multiple applications, such as general mixing, cell cultures, solubility studies, extraction procedures, diagnostic testing, and many other applications that require shaking. Shakers are reliable in analog or digital operating systems with the choice of three platform sizes, combining ease of use with durability and accuracy.

The triple-eccentric drive handles heavy loads, provides uniform agitation and continuous 24/7 operation, even at high speeds.

The CO<sub>2</sub>-resistant digital unit can be used continuously in a CO<sub>2</sub> incubator without malfunction or the formation of carbolic acid on electrical components.

- Platform sizes accept loads up to 35 lbs.
- Can be used in a variety of incubators, warm rooms, environmental chambers and refrigerators
- Variable speed from 40 to 400 rpm, controlled by a rotary dial monitored accurately by a traditional tachometer
- Perform timed studies with timed operation from 1 to 60 minutes or operate shaker in continuous mode
- Electrical and mechanical components treated to protect them from up to 10% CO<sub>2</sub> and 95% noncondensing humidity
- Prevents humidity and CO<sub>2</sub> from reacting with electrical components and forming carbolic acid

#### Specifications:

Temperature range ..... 0°C to 40°C

Humidity range ..... 20 to 80% noncondensing humidity

Speed range ..... 40 to 400 rpm

| Cat. No. | Mfr. No. | Description   | Qty. |
|----------|----------|---|------|
| S10886   | SHKA2000 | Small - analog shaker                                       | 1/ea |
| S10686   | 3524-2   | 18 x 18 in. platform with 64 x 25mL Erlenmeyer flask clamps | 1/ea |



### Thermo Scientific MaxQ™ 4450 Benchtop Orbital Shaker

THERMO SCIENTIFIC - Versatile incubated and refrigerated shaker ideal for incubating a small number of vessels.

These shakers combine incubated/refrigerated temperatures with orbital shaking in a compact footprint. Ideal for cell culture, solubility studies, extraction procedures and protein expression. Clear, scratch-resistant lid allows unobstructed viewing without disturbing chamber temperature.

Chamber holds four 1L flasks. Interlock stops platform when lid is opened. Three individual LED displays: speed, time and temperature. Variable speed control from 15 to 500 rpm.

- Triple eccentric drive handles heavy loads, uniform agitation and continuous 24-hour operation, even at high speeds
- Overtemperature safety feature with independent thermostat provides additional backup by controlling heat if main temperature controller fails
- Continuous and timed from 0.1 to 999 hours or 0.1 to 999 minutes
- Shaker shutdown and audible/visual alarms signal temperature deviations or if unit operates  $\pm 10\%$  of set speed, preventing shaker from walking
- Soft-start feature helps eliminate sudden starts and stops, splashing of vessel contents or wetting of flask closure
- Set point retention retains parameters during power failure and restarts unit automatically after power is restored
- Solid-state DC brushless motor is maintenance-free
- For plasmid purification and protein expression in bacteria for use with MaxQ 4450 with cooling coil option

#### Specifications:

Temperature range ..... 5°C above ambient to 80°C

Temperature accuracy .....  $\pm 0.1^\circ\text{C}$  at 37°C

Speed range ..... 40-400 rpm

| Cat. No. | Mfr. No. | Description                                      | Qty. |
|----------|----------|--|------|
| S108848  | SHKA4450 | Analog shaker - incubated - without cooling coil | 1/ea |

# General Lab

## Shakers

### 3-Dimensional Shakers

AZER SCIENTIFIC - These platform shakers provide a 3-dimensional "nutation" motion for moderately aggressive mixing. They are incubator- and cold room-safe. Two platform sizes and two rubber mat configurations allow for thorough, foam-free mixing in blood tubes and centrifuge tubes, as well as in a variety of flat vessels.



Manufactured in a mini and standard version, each shaker comes complete with autoclavable dimpled mats for tube applications. Optional flat mats are available for mixing other vessel types. Both models have been designed to conserve bench space. The mini shaker is supplied with a 10.5 x 7.5 in. platform while the standard shaker's 12 x 12 in. platform expands the useable work surface by 80%.

#### Specifications

Maximum speed ..... 24 rpm  
Tilt angle ..... +/- 20°  
Maximum capacity ..... 2.0kg/4.4 lbs.  
Operating temp. ..... +4°C to +65°C  
Dimensions ..... (Mini) 10.5 x 7.5 x 8 in.; (standard) 12 x 12 x 8.3 in.  
Electrical ..... 115V~, 60 Hz

| Cat. No.      | Mfr. No. | Description | Qty. |
|---------------|----------|-------------|------|
| <b>ES3359</b> | ES3359   | Mini        | 1/ea |
| <b>ES3361</b> | ES3361   | Standard    | 1/ea |



### Flask Dancer Orbital Shaker

BOEKEL - This microprocessor-controlled shaker uses a smooth horizontal orbital motion for mixing in bottles, flasks and beakers. It features a soft start and noise-free operation. Platform not included.

#### Specifications:

Speed ..... 50 to 300 rpm  
Orbit ..... 10mm  
Timer ..... 1 minute to 96 hours  
Time setting resolution ..... 1 minute  
Dimensions (W x D x H) ..... 10½ x 10 x 3¼ in.  
Power requirements ..... 12V, 0.5A

| Cat. No.        | Mfr. No. | Description    | Qty. |
|-----------------|----------|----------------|------|
| <b>R3301-3A</b> | 270200   | Orbital shaker | 1/ea |



### Groovin' Tubes Compact Benchtop Shaker/Incubator

BOEKEL - This shaker/incubator is three instruments in one. It can function as a microtube thermoshaker, a compact benchtop incubator without shaking or a microtube shaker without temperature control.

#### Specifications:

Temperature range ..... Ambient +5°C to 100°C  
Speed ..... 250 to 1,400 rpm  
Orbit ..... 2mm  
Timer (with auto switch off) ..... 1 minute to 96 hours  
Time setting resolution ..... 1 minute  
Dimensions (W x D x H) ..... 8 x 9 x 5 in. (205 x 230 x 130mm)  
Power requirements ..... 12V, 0.5A

| Cat. No.         | Mfr. No. | Description   | Qty. |
|------------------|----------|---|------|
| <b>R3301-20A</b> | 270500   | Benchtop shaker/incubator                           | 1/ea |
| <b>J1667-9A</b>  | 270590   | Interchangeable block for 20 x 1.5/2.0mL microtubes | 1/ea |



### HS 260 Control Horizontal Shaker

IKA WORKS - This compact, flat shaker features ideal swivel motion and can accommodate a maximum shaking weight of 7.5kg. It has an electronic adjustment of speed and timer. Control shaker has a digital display for speed, timer and operating modes, integrated end point positioning and RS-232 interface. The shaker can be used with a wide range of attachments (available separately) to make it possible to use with almost all shapes and sizes of vessels.

#### Specifications:

Shaking movement ..... Reciprocating  
Orbital diameter ..... 20mm  
Speed range ..... 10 to 300 rpm  
Timer ..... Continuous operation or 0 to 9 hours to 59 minutes  
Dimensions (W x D x H) ..... 360 x 420 x 100mm

| Cat. No.         | Mfr. No. | Description                     | Qty. |
|------------------|----------|---------------------------------|------|
| <b>S7389-158</b> | 3066701  | Control shaker - 115V, 50/60 Hz | 1/ea |

### Accessory for IKA® HS 260 and KS 260 Shakers

IKA WORKS - This universal attachment has four adjustable bars to secure your vessels.



| Cat. No.  | Mfr. No. | Description          | Qty. |
|-----------|----------|----------------------|------|
| S7389-128 | 8017400  | Universal attachment | 1/ea |

### IKA® Lab Dancer Test Tube Shaker

IKA WORKS - Compact and reliable, this innovative orbital shaker is ideal for mixing small vessels up to 30mm in diameter, such as test tubes, centrifuge tubes and Eppendorf® vessels. Just push the vessel gently into the soft attachment to start the shaking process. Shaking stops when you lift it out. The upper sections are made from inert plastic. The zinc die cast base holds unit secure during use. Maximum capacity: one 50mL tube.



#### Specifications:

Fixed speed ..... 2,800 rpm  
Shaking stroke ..... 4.5mm orbital  
Dimensions (dia. x H) ..... 100 x 70mm

| Cat. No. | Mfr. No. | Description      | Qty. |
|----------|----------|------------------|------|
| S7389-62 | 3365001  | Test tube shaker | 1/ea |

### KS 130 Basic Orbital Shaker

IKA WORKS - This small, quiet shaker helps ensure long service life with ideal swivel motion and can accommodate a maximum shaking weight of 2kg. Features an electronic adjustment of speed and timer. Basic model has LED line display for speed and time adjustment. Shaker can be used with a wide range of attachments to make it possible to use almost all shapes and sizes of vessels. Universal attachment S7389-127 includes one basic holder; three clamping rolls and six fastening screws.



#### Specifications:

Shaking movement ..... Orbital  
Orbital diameter ..... 4mm  
Speed range ..... 80 to 800 rpm  
Dimensions ..... 270 x 316 x 98mm

| Cat. No.  | Mfr. No. | Description                   | Qty. |
|-----------|----------|-------------------------------|------|
| S7389-160 | 2980001  | Basic shaker - 115V, 50/60 Hz | 1/ea |
| S7389-127 | 8017300  | Universal attachment          | 1/ea |

### MS 3 Basic and Digital Orbital Shakers

IKA WORKS - These compact, universal shakers are suitable for shaking tasks with all small vessels and microtiter plates. They feature attachment detection and offer continuous or touch operation. The shakers have two operating modes. With safe mode A, the maximum speed of 3,000 rpm may be reached with the standard attachment in touch mode. When using other attachments, the speed is limited to 1,300 rpm. In mode B, a speed of 3,000 rpm is possible with all attachments. Units are stable in all speed ranges. Digital shakers have a timer with countdown function. Both shakers include standard attachment, universal attachment, one-hand insert and test tube insert. Digital shaker S7389-166 also includes microtiter attachment. Inserts S7389-151 is for use with universal attachment S7389-130.

#### Specifications:

Shaking movement ..... Orbital  
Orbital diameter ..... 4.5mm  
Speed range ..... 0 to 3,000 rpm  
Dimensions (W x D x H) ..... 148 x 205 x 63mm

| Cat. No.  | Mfr. No. | Description                         | Qty. |
|-----------|----------|-------------------------------------|------|
| S7389-165 | 3617000  | Basic shaker - 100-240V, 50/60 Hz   | 1/ea |
| S7389-166 | 3319000  | Digital shaker - 100-240V, 50/60 Hz | 1/ea |
| S7389-130 | 3426600  | Universal attachment                | 1/ea |
| S7389-151 | L001860  | Test tube inserts - 4 x 16mm        | 1/ea |

### VORTEX 3 Orbital Shaker

IKA WORKS - This shaker can be used for either short-term or continuous operation. Features an infinitely adjustable wide-speed range. Unit has a silicon base with special feet to minimize vibration at high speeds. Attachments (available separately) make the shakers useful for many different applications. Tube holding foam inserts available for use with universal attachment S7389-134.



#### Specifications:

Shaking movement ..... Orbital  
Orbital diameter ..... 4mm  
Speed range ..... 500 to 2,500 rpm  
Dimensions (W x D x H) ..... 127 x 149 x 136mm

| Cat. No.  | Mfr. No. | Description               | Qty. |
|-----------|----------|---------------------------|------|
| S7389-168 | 3340001  | Vortex 3 - 115V, 50/60 Hz | 1/ea |
| S7389-134 | 3342400  | Universal attachment      | 1/ea |

# General Lab

## Shakers



### Talboys Advanced 3500 Shaker

**TROEMNER** - This digital orbital shaker is designed for a range of applications including cell cultures, solubility studies, bacterial suspensions and general mixing. The variable-speed microprocessor control provides consistent, uniform mixing action, while the ramping feature slowly increases speed to desired set point to avoid splashing. The timer can be set for operation from 1 second to 160 hours and will display elapsed time or count down to zero. An audible alarm sounds when the timer reaches zero. The LED displays show speed and time independently.

The Accu-Drive shaking system delivers exceptional speed control, accuracy and durability. The system continuously monitors shaking speed and maintains set point even under changing loads. Displayed speed is accurate to 1% of setting or 1 rpm for speeds below 100rpm. A built-in load sensor detects unbalanced conditions and automatically reduces rpm to a safe speed or stops unit to protect samples.

The powerful triple eccentric drive and brushless motor provide reliable service in continuous duty and can handle loads up to 35 lbs. Microprocessor displays last set point and restarts if power is interrupted. RS232 serial port provides two-way communication for data logging and unit control. Shaker is supplied with a nonskid rubber mat that fits the 13 x 11 in. platform tray. Tray is suitable for holding petri dishes and cell culture flasks.

#### Specifications:

Orbit ..... 0.75 in. (19mm)  
 Timer range..... 1 second to 160 hours  
 Maximum load..... 35 lbs. (15.9kg)

#### Speed

Range ..... 15 to 500 rpm  
 Accuracy..... ±1% of set speed or 1 rpm for speeds below 100 rpm

| Cat. No.  | Mfr. No. | Description   | Qty. |
|-----------|----------|---------------|------|
| TR-980023 | 980403   | Shaker - 120V | 1/ea |



### Talboys Microplate Shaker

**TROEMNER** - This shaker is designed for immunoassays and general microplate shaking. The four-place platform holds either two or four microplates, deep-well blocks or up to two microtube racks. Plates are firmly locked into place with retaining springs. Microprocessor variable-speed control provides consistent, uniform mixing action. Ramping feature slowly increases speed to set point for added safety. Independent LED displays feature speed and time. Timer will display elapsed time or, when programmed to user-defined limit, will count down to zero and shut off unit. Audible alarm sounds when time reaches zero. The triple eccentric drive features permanently lubricated ball bearings. The maintenance-free, brushless DC motor provides a long service life. Ideal for use in incubators, CO<sub>2</sub> incubators or cold rooms. Shakers accommodate a 14°F to 140°F (-10° to +60°C), 80% relative humidity, noncondensing environment. Durable base is constructed of cast aluminum for extra stability.

#### Specifications:

Orbit ..... 3mm  
 Timer..... 1 second to 160 hours

#### Speed

Range ..... 100 to 1,200 rpm  
 Accuracy..... ±2%

| Cat. No. | Mfr. No. | Description                          | Qty. |
|----------|----------|--------------------------------------|------|
| TR980178 | 980178   | Shaker 120V - 7.75 x 11 in. platform | 1/ea |

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**call today for prompt shipments of**  
**your laboratory supplies.**

**Talboys Digital Mini Shaker**

TROEMNER - This shaker features a variable-speed microprocessor control that provides consistent, uniform mixing action. The ramping feature slowly increases speed to set point for added safety. The independent LED display features speed and time. Timer displays elapsed time or, when programmed to user-defined limit, will count down to zero and shut off unit. The audible alarm sounds when time reaches zero. Ideal for use in incubators, CO<sub>2</sub> incubators or cold rooms. Shakers accommodate a 14°F to 140°F (-10°C to +60°C), 80% relative humidity, noncondensing environment. Durable base is constructed of cast aluminum for extra stability. The triple eccentric drive features permanently lubricated ball bearings. The maintenance-free, brushless DC motor provides a long service life.

The tray included with the shaker can be used as a platform for mounting optional Erlenmeyer flask clamps, test tube racks or microplate holders. It features a nonskid rubber mat appropriate for holding petri dishes and cell culture flasks.

**Specifications:**

|               |                       |
|---------------|-----------------------|
| Orbit .....   | 3mm                   |
| Timer.....    | 1 second to 160 hours |
| Capacity..... | .25 lbs.              |

**Speed**

|               |                  |
|---------------|------------------|
| Range .....   | 100 to 1,200 rpm |
| Accuracy..... | ±2%              |

| Cat. No. | Mfr. No. | Description                | Qty. |
|----------|----------|----------------------------|------|
| TR980175 | 980175   | Digital mini shaker - 120V | 1/ea |

**Talboys Digital Rocking Platform Shaker**

TROEMNER - This shaker is ideal for cell culture work, staining and destaining gels, hybridization procedures, hematology and blotting techniques. Designed for use in incubators, CO<sub>2</sub> incubators, cold rooms (-10°C to +60°C) and 80% relative humidity, noncondensing environments. The large platform tray is ideal for holding staining trays, culture flasks, petri dishes and microtiter and multiwell plates. Spill-resistant design channels fluids away from internal components. Base is constructed of durable cast aluminum for extra stability.

Microprocessor touchpad control provides electronic angle adjustment that allows user to easily adjust rocking angle from 0° to 15° while unit is operating. Precise speed control provides smooth, low-speed rocking motion down to 1 rpm. For improved repeatability, onboard memory recalls last settings even when unit is turned off.

Audible and visual signals will activate when system detects an overloaded, unbalanced condition or obstruction of the tray. LED display will show elapsed time or, when programmed to user-defined limit, will count down to zero and shut off unit. Audible alarm will sound when time reaches zero. Optional alarm mute can be set from the touchpad control. Powerful, maintenance-free stepper motor handles heavy loads up to 10 lbs. (4.5kg) and provides a long service life.

**Specifications:**

|                       |                       |
|-----------------------|-----------------------|
| Tilt angle .....      | 0° to 15°             |
| Timer.....            | 1 second to 160 hours |
| Maximum capacity..... | 10 lbs.               |

**Speed**

|               |             |
|---------------|-------------|
| Range .....   | 1 to 50 rpm |
| Accuracy..... | ±1%         |

| Cat. No. | Mfr. No. | Description                           | Qty. |
|----------|----------|---------------------------------------|------|
| TR980530 | 980530   | Shaker 120V - 12.75 x 10 in. platform | 1/ea |

# General Lab

## Stirrers

### Thermo Scientific Cimarec® Ceramic-Top Stirrer

THERMO SCIENTIFIC - This stable, low-profile stirrer features StirTrac™ technology that improves slow-speed stirring and provides consistent speed control and stronger magnetic coupling. The technology's braking feature immediately stops the stir bar for fast flask removal. The unit's seamless reflective white Cimarec® ceramic top increases sample visibility and is easy to clean and alkali/acid-resistant. Offering an adjustable speed range from 60 to 1,200 rpm, units provide exceptional magnetic coupling, which ensures a locked stir bar with the drive magnet, even in viscous solutions. Stirrers' integral ring-stand holder accommodates a 0.5 in.-diameter support rod.



| Cat. No. | Mfr. No. | Description        | Qty. |
|----------|----------|--------------------|------|
| S8275-5  | S131125  | 4 x 4 in. platform | 1/ea |



### IKA® C-Mag Hot Plate Stirrer HS7

IKA WORKS - This hot plate stirrer has a fixed safety circuit that shuts off if the temperature rises above 550°C. A hot-top indicator light flashes if the surface is hot to the touch. Digital display allows for accurate and repeatable temperature settings. Units have a powerful motor and provide high magnetic adhesion to help prevent stir bar coupling. Microprocessor control helps maintain constant speed and set temperature. A one-piece seamless glass ceramic top provides excellent resistance to chemicals. Elevated control panel minimizes contact with spills and is easy to read and adjust.

#### Specifications:

|                              |                        |
|------------------------------|------------------------|
| Maximum stirring volume..... | 10L (H <sub>2</sub> O) |
| Speed range .....            | 100 to 1,500 rpm       |
| Temperature range.....       | 50°C to 500°C          |
| Heat output .....            | 1,000W                 |
| Set-up plate size .....      | 180 x 180mm            |
| Dimensions (W x D x H) ..... | 220 x 330 x 105mm      |
| Power requirement .....      | 115/230V, 50/60 Hz     |

| Cat. No. | Mfr. No. | Description                        | Qty. |
|----------|----------|------------------------------------|------|
| S7389-2  | 3581201  | IKA® C-Mag hot plate stirrer (HS7) | 1/ea |



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### Talboys Basic Stirrer

TROEMNER - This rugged, compact unit stirs up to 1,000mL of liquid. It has a durable 4.5 in. diameter cast aluminum top plate. The electronic speed control adjusts stirring from 100 to 1,200 rpm. The powerful motor and magnet deliver reliable and consistent stirring. The compact design saves bench space. A 1.5 x 0.315 in. diameter PTFE-coated stir bar is included.



#### Specifications:

|                        |                  |
|------------------------|------------------|
| Temperature range..... | To 400°C         |
| Speed range .....      | 100 to 1,200 rpm |
| Maximum capacity.....  | 1,000mL          |

| Cat. No.  | Mfr. No. | Description                           | Qty. |
|-----------|----------|---------------------------------------|------|
| TR-953200 | 953200   | Basic stirrer - 6.5 x 5.75 x 4.75 in. | 1/ea |

### Thermo Scientific Direct Heat CO<sub>2</sub> Incubator - Heracell® 150i and 240i

THERMO SCIENTIFIC - The Heracell® CO<sub>2</sub> Incubators have internal volumes of 5.3 cu. ft. or 8.5 cu. ft., with a choice of TC or IR CO<sub>2</sub> control. Dual stack configurations double capacity for additional storage while saving lab space. Heracell® is also available with 100% solid copper interiors which provides continuous protection against contamination. Only 100% copper eliminates 99% of microbial contaminates.



The iCAN™ touchscreen allows for total contamination control monitoring and an automatic 90°C decontamination function decontaminates the entire chamber interior without the need to remove sensors, fittings or shelves. A panless humidity water reservoir promotes faster humidity recovery. Select an O<sub>2</sub> option to simulate physiological environments for IVF applications.

#### Specifications:

|                                |                |
|--------------------------------|----------------|
| Temperature range .....        | +3°C to +55°C  |
| Temperature deviation .....    | ±0.1°C/±0.5°C  |
| Ambient temperature range..... | +18°C to +33°C |
| Power requirement .....        | 120V, 50/60 Hz |

| Cat. No.   | Mfr. No. | Description   | Qty. |
|--|----------|---|------|
| <b>Heracell® 150i incubator - single chamber</b> |          |   |      |
| J1805-25   | 51026282 | TCD sensor - high temp decon  | 1/ea |
| J1805-27   | 51026406 | IR sensor - high temp decon   | 1/ea |
| <b>51026283</b>                                  | 51026283 | 100% pure copper inner casing   | 1/ea |
| <b>51026534</b>                                  | 51026534 | 100% pure copper inner casing - IR sensor   | 1/ea |
| <b>Heracell® 150i incubator - dual chamber</b>   |          |   |      |
| J1805-26   | 50116048 | CO <sub>2</sub> incubator with TCD sensor - high temp decon   | 1/ea |
| <b>50116050</b>                                  | 50116050 | 100% pure copper inner casing - complete with 185mm castor mounted support frame                                | 1/ea |
| <b>Heracell® 150i Tri-gas incubator</b>          |          |   |      |
| <b>51026410</b>                                  | 51026410 | Stainless steel inner casing - O <sub>2</sub> control range 1–21% - 3 door inner glass door assembly            | 1/ea |
| <b>51026408</b>                                  | 51026408 | 100% pure copper inner casing, O <sub>2</sub> control range 1–21% - 3 door inner glass door assembly            | 1/ea |
| <b>51026402</b>                                  | 51026402 | Stainless steel inner casing IR sensor - O <sub>2</sub> control range 1–21% - 3 door inner glass door assembly  | 1/ea |
| <b>51026537</b>                                  | 51026537 | 100% pure copper inner casing, IR sensor, O <sub>2</sub> control range 1–21% - 3 door inner glass door assembly | 1/ea |
| <b>Heracell® 240i - single chamber</b>           |          |   |      |
| <b>51026331</b>                                  | 51026331 | Stainless steel inner casing  | 1/ea |
| <b>51026332</b>                                  | 51026332 | 100% pure copper inner casing   | 1/ea |
| <b>51026420</b>                                  | 51026420 | Stainless steel inner casing - IR sensor  | 1/ea |
| <b>51026419</b>                                  | 51026419 | 100% pure copper inner casing - IR sensor   | 1/ea |

#### Accessories

|          |          |  |      |
|----------|----------|--|------|
| J1805-31 | 50057161 | Roller base, support frame for 150i                            | 1/ea |
| J1805-33 | 50059043 | External gas guard for Heracell®                               | 1/ea |
| J1805-34 | 95001012 | CO <sub>2</sub> gas regulator, 2-stage, for gas tank           | 1/ea |
| 50067224 | 50067224 | Support frame with castors for double chamber 240i, 200mm high | 1/ea |

### Thermo Scientific Forma® 3960 Series Environmental Chamber

THERMO SCIENTIFIC - Ideal for many clinical applications, including elevated temperature stability and shelf-life testing.



The 3960 Series features the horizontal laminar airflow system, stainless steel interior, microprocessor controls for a high-performance, high-capacity unit that is ideal for a wide range of constant temperature applications. Optimum uniformity and an elevated temperature range helps ensure easy compliance with regulatory requirements.

Laminar airflow through side plenums for extremely tight temperature uniformity. Microprocessor controls offer constant display of temperature, as well as an alphanumeric message center for ease of setup and programming. Access ports, locking casters and alarm contacts are standard.

Directed airflow system promotes an ideal growth environment. Positive pressure feed plenum and negative pressure return plenum direct air across shelf surface. Feed plenum cannot be blocked by chamber contents. Precise temperature control without complicated programming. Operating modes include run, setpoint, calibration and system configuration.

Easy-to-read display for continuous monitoring. Audible/visual under- and overtemperature alarms. Programmable and indicator low alarm and remote alarm contacts. Data outputs allow connection to inhouse monitor/alarm system to track chamber conditions.

Exterior cabinet is 18 gauge cold-rolled steel, powder coated for durability; resists scratches and chipping. Heated glass door for minimal condensation and a clear view. 2 in. (5.1cm) thick fiberglass cabinet insulation for maximum product thermal protection. Solid, stainless-steel interior and five heavy-duty solid stainless steel shelves ensures long life and minimized equipment costs. Thru-wall access ports on both chamber sides for probes, sensors, etc.

Interior GFCI duplex receptacle on 115V model (single European 230V CEE 7 on 230V model) for shakers, cell rollers and other equipment.

Exterior receptacle on upper-right side of control panel for connecting optional recorder or other equipment.

#### Specifications:

|                               |  |
|-------------------------------|--|
| Temperature range .....       | 5°C above ambient to 60°C (140°F)                                      |
| Temperature uniformity .....  | ±0.4°C at 30°C (86°F); ±0.3°C at 37°C (98.6°F); ±0.5°C at 45°C (113°F) |
| Temperature sensitivity ..... | ±0.1°C   |

| Cat. No.        | Mfr. No. | Description                        | Qty. |
|-----------------|----------|------------------------------------|------|
| <b>J8105-48</b> | 3960     | 29 cu. ft. - environmental chamber | 1/ea |

# Incubators

## Thermo Scientific Heratherm Advanced Protocol Microbiological Incubators

THERMO SCIENTIFIC - Innovative dual convection technology with excellent temperature performance, providing an optimal, sample environment.

- Dual convection for application versatility—fan speed adjustable from 0 to 100%
- Advanced digital timer for daily or weekly ON/OFF cycles
- Internal socket for connection of electrical device such as shakers or stirrers inside unit
- Easy to clean rounded edges
- Stackable—no tools or kit required
- Corrosion-resistant, stainless steel interior (1.4301/AISI 304)
- Large, easy-to-view vacuum fluorescent display
- Internal glass door allows sample viewing without impacting temperature



### Specifications:

Temperature range ..... 5°C above ambient to 105°C  
Temperature uniformity ..... ± 0.2 °C (measured at 37°C)  
Temperature stability ..... ± 0.1°C (measured at 37°C)

### J1790-45

Power requirements ..... 120V 60 Hz; 600w; 5A

### Dimensions (W x H x D)

Chamber ..... 13.9 x 20.0 x 16.3 in.  
Exterior ..... 20.9 x 28.3 x 22.2 in.

### J1790-46

Power requirements ..... 120V 60 Hz; 840w; 7A

### Dimensions (W x H x D)

Chamber ..... 18.3 x 23.9 x 16.3 in.  
Exterior ..... 25.2 x 32.3 x 22.2 in.

### J1790-47

Power requirements ..... 120V 60 Hz; 1020w; 8.5A

### Dimensions (D x W x H)

Chamber ..... 21.4 x 18.3 x 27.9 in.  
Exterior ..... 29.1 x 25.2 x 36.2 in.

| Cat. No. | Mfr. No. | Description                  | Qty. |
|----------|----------|------------------------------|------|
| J1790-45 | 51028066 | 2.6 cu. ft. (60L) incubator  | 1/ea |
| J1790-46 | 51028067 | 4.0 cu. ft. (100L) incubator | 1/ea |
| J1790-47 | 51028068 | 6.3 cu. ft. (180L) incubator | 1/ea |

## Thermo Scientific Heratherm Advanced Protocol Security Incubators

THERMO SCIENTIFIC - This incubator provides sample protection with all the features of the General and Advanced Protocol models plus:

- Certified 140°C decontamination cycle. At 140 °C contaminating microorganisms are reduced to a minimum, comparable to sterilization, within a six hour cycle
- No need for separate autoclaving of interior fittings
- Certified by an accredited microbiological institute
- Lockable incubator door for restricted access
- Audible alarm if door is left open. Automatic over-and-under temperature alarm
- Stainless steel exterior available separately



Note: Access port replaces internal socket due to decontamination cycle

### Specifications:

Temperature range ..... 5°C above ambient to 105°C  
Temperature uniformity ..... ± 0.2 °C (measured at 37°C)  
Temperature stability ..... ± 0.1°C (measured at 37°C)

### J1790-48

Power requirements ..... 120V 60 Hz; 1390w; 11.6A

### Dimensions (W x H x D)

Chamber ..... 13.9 x 20.0 x 16.3 in.  
Exterior ..... 20.9 x 28.3 x 22.2 in.

### J1790-49

Power requirements ..... 120V 60 Hz; 1390w; 11.6A

### Dimensions (W x H x D)

Chamber ..... 18.3 x 23.9 x 16.3 in.  
Exterior ..... 25.2 x 32.3 x 22.2 in.

### J1790-50

Power requirements ..... 120V 60 Hz; 1390w; 11.6A

### Dimensions (D x W x H)

Chamber ..... 21.4 x 18.3 x 27.9 in.  
Exterior ..... 29.1 x 25.2 x 36.2 in.

| Cat. No. | Mfr. No. | Description                  | Qty. |
|----------|----------|------------------------------|------|
| J1790-48 | 51028069 | 2.6 cu. ft. (60L) incubator  | 1/ea |
| J1790-49 | 51028070 | 4.0 cu. ft. (100L) incubator | 1/ea |
| J1790-50 | 51028111 | 6.3 cu. ft. (180L) incubator | 1/ea |

\*Also available in 400L and 750L sizes

## Thermo Scientific Heratherm Compact Incubator

THERMO SCIENTIFIC - The most compact unit of the Heratherm microbiological incubator family has an 18L capacity, ideal for a personalized workspace.



- Minimal footprint for space restricted lab areas
- Temperatures at or below ambient
- High temperature accuracy
- Internal light facilitates sample observation
- Two stainless steel shelves

### Specifications:

Temperature range ..... 17°C to 40°C  
 Temperature uniformity ..... ±1.2°C (measured at 37°C)  
 Temperature stability ..... ±0.2°C (measured at 37°C)  
 Power requirements ..... 100–240V, 50/60 Hz; 45w; 0.45–0.85A

### Dimensions (W x H x D)

Chamber ..... 7.1 x 12.2 x 11.4 in.  
 Exterior ..... 10.2 x 16.3 x 18.5 in.

| Cat. No. | Mfr. No. | Description                          | Qty. |
|----------|----------|--------------------------------------|------|
| J1790-54 | 50125590 | 0.65 cu. ft. (18L) compact incubator | 1/ea |



## Thermo Scientific Heratherm General Protocol Microbiological Incubators

THERMO SCIENTIFIC - This incubator is suited for routine applications in pharmaceutical, medical, food and research laboratories, with sample safety in mind. Gravity convection provides gentle airflow and minimal drying out.

- Corrosion-resistant, stainless steel chamber (1.4016 / AISI 430)
- Easy to clean rounded edges
- Stackable—No tools or kit required
- Large, easy to read vacuum fluorescent display
- Internal glass door allows sample viewing without impacting temperature

### Specifications:

Temperature range ..... ambient +5° to 75°C  
 Temperature uniformity ..... ±0.6°C (measured at 37°C)  
 Temperature stability ..... ±0.2°C (measured at 37°C)

### J1790-42

Power requirements ..... 120V 60Hz; 300w; 2.5A

### Dimensions (W x H x D)

Chamber ..... 13.9 x 20.0 x 16.3 in.  
 Exterior ..... 20.9 x 28.3 x 22.2 in.

### J1790-43

Power requirements ..... 120V 60Hz; 540w; 4.5A

### Dimensions (W x H x D)

Chamber ..... 18.3 x 23.9 x 16.3 in.  
 Exterior ..... 25.2 x 32.3 x 22.2 in.

### J1790-44

Power requirements ..... 120V 60Hz; 720w; 6A

### Dimensions (W x H x D)

Chamber ..... 18.3 x 27.9 x 23.2 in.  
 Exterior ..... 25.2 x 36.2 x 29.1 in.



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**Our mission** is to help you deliver the best possible care. We give you the tools to keep your lab running at its optimal level, so you can focus on **what matters most—your patients.**

| Cat. No. | Mfr. No. | Description                  | Qty. |
|----------|----------|------------------------------|------|
| J1790-42 | 51028063 | 2.6 cu. ft. (60L) incubator  | 1/ea |
| J1790-43 | 51028064 | 4.0 cu. ft. (100L) incubator | 1/ea |
| J1790-44 | 51028065 | 6.3 cu. ft. (180L) incubator | 1/ea |

\*Also available in 400L and 750L sizes

# Incubators

## Thermo Scientific Large-Capacity Reach-In CO<sub>2</sub> Incubator

THERMO SCIENTIFIC - Full-featured Thermo Scientific Large-Capacity Reach-In CO<sub>2</sub> Incubator is ideal for culturing large volumes of patient samples for bacterial growth, performing short-term growth studies, and working with large volume products. This unit provides elevated RH to prevent product desiccation in medium-term cultures and maintains temperature uniformity, even when equipment (cell rollers, rockers, shakers, spinners, stirrers) is installed in the chamber.

- Directed horizontal laminar airflow system promotes ideal growth environment
- Three RH system settings: off, medium, high
- Three water fill options: automatic, semi-automatic, ergonomic manual
- Enviro-Scan® microprocessor control
- Selectable temperature, overtemperature, CO<sub>2</sub>, humidity
- Remote alarm contacts and audible/visual alarm and alarm silence
- Data outputs to help meet internal and regulatory documentation requirements
- Heated triple-pane glass door minimizes condensation and permits a clear view to stainless steel interior
- Two thru-wall access ports (one on right and left sidewalls) for probes, sensors, power cords
- Swivel, locking casters ensure easy mobility for installation and cleaning and leveling feet provide stability for added safety in the lab



### Specifications:

Temperature range ..... +5°C above ambient to 60°C

Temperature uniformity ..... ±0.3°C at 37°C

Temperature control ..... ±0.1°C

| Cat. No. | Mfr. No. | Description  | Qty. |
|----------|----------|--|------|
| J1805-30 | 3950     | 29 cu. ft. - incubator   | 1/ea |
| J1805-41 | 191596   | Carboy kit   | 1/ea |
| J1805-42 | 190239   | Lexan inner door kit   | 1/ea |
| J1805-44 | 190591   | Universal door cover for glass doors for 3950, factory installed | 1/ea |

## Thermo Scientific Midi CO<sub>2</sub> Incubator

THERMO SCIENTIFIC - With a chamber capacity of 1.4 cu. ft., this incubator is designed for personal, single-user or small sample applications and is ideal for benchtop use or in a biological safety cabinet. It features an IntrLogic® II control system with alphanumeric set-point display of temperature, CO<sub>2</sub>, alarm, calibration and diagnostic functions. The incubator has a seamless interior chamber with radiant wall heating for accurate, uniform temperatures in a low-maintenance, easy-to-clean configuration. It also has auto-zero calibration, which maintains accurate thermal gas performance. A touchpad allows for the control of temperature and CO<sub>2</sub> and a high-visibility vacuum fluorescent display allows for at-a-glance monitoring from across the room.



The incubator's solid outer door closes gently against the cabinet with a magnetic gasket and the tempered glass inner door is heated by the outer door to prevent condensation. The reinforced cabinet permits stacking and four stainless-steel shelves are supplied. Incubator has a thermal conductivity sensor, which provides accurate CO<sub>2</sub> control for applications with more consistent temperature and humidity levels. Power requirements: 120V, 60 Hz, 1.5A. Unit is built to meet UL, CUL and CE standards for safety and performance.

### Specifications:

Temperature range ..... 5°C above ambient to 60°C

Temperature control ..... ±0.1°C

Interior dimensions ..... 14 x 12 x 14 in. (H x D x W)

Exterior dimensions ..... 18.3 x 18.5 x 23.5 in. (H x D x W)

| Cat. No. | Mfr. No. | Description                 | Qty. |
|----------|----------|-----------------------------|------|
| J1756-78 | 3403     | 1.4 cu. ft. (40L) incubator | 1/ea |

## Thermo Scientific Water Jacket CO<sub>2</sub> Incubators

THERMO SCIENTIFIC - Water Jacket CO<sub>2</sub> Incubators feature a 6.5 cu. ft., corrosion-resistant steel chamber for storing cultures. Insulated with a triple-wall cabinet and a jacket of temperature condition water, the unit offers protection against heat loss, even in a power outage. Remote connectivity to in-house alarm system. Optional HEPA airflow system provides Class 100 air quality in 5 minutes of a door opening providing protection from airborne contaminants.



Internal shelves remove without tools for easy cleaning and an included stacking kit allows for convenient configurations. Heated dual-pane, inner glass door minimizes condensation with improved responsiveness and faster temperature recovery.

| Cat. No. | Mfr. No. | Description                                 | Qty. |
|----------|----------|---|------|
| J1805-28 | 3010     | Water jacket incubator - CO <sub>2</sub>    | 1/ea |
| J1805-29 | 3020     | Water jacket incubator - CO <sub>2</sub> IR | 1/ea |
| J1805-39 | 965010   | Regulator - CO <sub>2</sub> - 2-stage       | 1/ea |
| J1805-40 | 3050     | External gas guard for water jacket         | 1/ea |
| J1805-47 | 1902000  | Filter airflow HEPA system                  | 1/ea |



## High-Performance Digital Incubators

AZER SCIENTIFIC - These high-performance incubators are ideal for applications that require strict temperature control. They feature a SmartChek™ system that helps to ensure precise regulation of temperature. Microprocessor temperature control. In the event of a primary controller failure, an independent safety thermostat protects your samples. Warm air surrounds all interior sides (including the door) to provide a stable, uniform environment. The interior light turns on as you open the solid outer door. View contents through a full-size glass inner door. You can turn on a turbo fan for a quick recovery after the door is opened or for added uniformity. Each incubator includes an interior outlet for small equipment and two shelves.

### Specifications:

Temperature range ..... Ambient +5° to 95°C  
 Temperature accuracy ..... ±0.2°C  
 Display ..... To 0.1°C  
 Thermal control ..... Microprocessor  
 Power requirement ..... 120V, 60 Hz

### Model ESI311D

Temperature uniformity ..... ±0.2°C at 37°C, ±0.5°C at 56°C, ±0.75°C at 90°C

### Dimensions (W x H x D)

Chamber ..... 17 x 14 x 20 in.  
 Exterior ..... 27 x 20 x 29 in.

### Model ESI611D

Temperature uniformity ..... ±0.25°C at 37°C, ±0.6°C at 56°C, ±0.9° at 90°C

### Dimensions (W x H x D)

Chamber ..... 21 x 20 x 25 in.  
 Exterior ..... 31 x 26 x 34 in.

| Cat. No.       | Mfr. No. | Description  | Qty. |
|----------------|----------|--------------|------|
| <b>ESI311D</b> | ESI311D  | 2.75 cu. ft. | 1/ea |
| <b>ESI611D</b> | ESI611D  | 6 cu. ft.    | 1/ea |

## Mini Incubators

AZER SCIENTIFIC - Use these space-saving incubators to incubate culture flasks, dishes, test tubes and plates. The incubators can hold up to 48 petri dishes or 28 standard 96-well plates. Wraparound heating elements provide even heating and uniformity within each incubator chamber and are maintained by a hydraulic thermostat. A pilot light on the front panel indicates when the incubator is heating. Analog thermal control. View incubator contents through a large viewing area in the door. Incubators have a metal housing and doorframe, a corrosion-resistant interior and include one shelf. Choose from 120V or 230V models.



### Specifications:

Capacity ..... 0.375 cu. ft.  
 Temperature range ..... Ambient +5°C to 60°C  
 Temperature stability ..... ±0.6°C at 37°C

### Dimensions (W x D x H)

Chamber ..... 9 x 7.9 x 7.9 in.  
 Exterior ..... 11.2 x 11 x 13.2 in.

| Cat. No.          | Mfr. No.   | Description                 | Qty. |
|-------------------|------------|-----------------------------|------|
| <b>ESI110120V</b> | ESI110120V | Model 120V - 50/60 Hz, 0.6A | 1/ea |
| <b>ESI110230V</b> | ESI110230V | Model 230V - 50/60 Hz, 0.3A | 1/ea |



## Benchtop Incubator

BOEKEL - This convenient benchtop analog incubator provides you with a reliable, inexpensive method of incubating cultures, test kits, eggs and other biological materials. It is ideal for use in clinical, industrial and school laboratories and in physicians' offices. The unit includes a see-through smoked acrylic door. It includes a nickel-plated steel bottom shelf plus one adjustable shelf.

### Specifications:

Shelves supplied ..... 3  
 Power requirements ..... 120VAC, 90W

### Temperature

Range ..... To 60°C  
 Control ..... ±1.0°C

### Dimensions (W x D x H)

Chamber ..... 11½ x 12 x 10½ in.  
 Exterior ..... 13 x 14 x 16¼ in.

| Cat. No.        | Mfr. No. | Description                    | Qty. |
|-----------------|----------|--------------------------------|------|
| <b>J1670-10</b> | 132000   | 0.8 cu. ft. benchtop incubator | 1/ea |

# Incubators



## Complete Culture Control Analog Incubators

BOEKEL - These incubators are ideal for a wide range of applications, including culturing, bacteriology, warming of samples, E. coli tests and diagnostic protocol for water, wastewater, pharmaceutical and biotech testing. They are manufactured from 22G steel. The exterior is powder-coated for scratch- and stain-resistance and the interior is easy-to-clean aluminum. Incubators come with a thermometer as a standard accessory and have two adjustable shelves. Models below have a power requirement of 115VAC, 60 Hz. They also have a blower fan to improve heating and stability of the desired temperature. The 115VAC analog incubators meet UL and CSA requirements. Chamber dimensions (W x D x H): CCC 1.4a incubator - 13½ x 13½ x 13½ in.; CCC 2.5a incubator - 17 x 17 x 15 in.

| Cat . No.                                      | Mfr. No. | Description           | Qty. |
|--|----------|-----------------------|------|
| <b>CCC 1.4a analog incubator - 1.4 cu. ft.</b> |          |                       |      |
| BO139200                                       | 139200   | Solid door, 2 shelves | 1/cs |
| <b>CCC 2.5a analog incubator - 2.5 cu. ft.</b> |          |                       |      |
| BO139300                                       | 139300   | Solid door, 2 shelves | 1/cs |

## Complete Culture Control Digital Incubators

BOEKEL - These incubators are ideal for incubating and culturing reagents, media and samples in just about every laboratory where samples need warming and a steady temperature. They allow for digital input and readout of incubation temperature. Temperature range is from ambient +10°C to 90°C. The incubators contain a blower fan for rapid heat-up and better uniformity of temperature. An over-range safety thermostat with a red warning indicator light and 5 hour timer are also provided. Incubators utilize a PID controller and a separate power switch. Made from 22G steel and the exterior is powder-coated for both scratch- and stain-resistance. The interior is easy-to-clean aluminum. Chamber dimensions (W x D x H): CCC 0.5d incubator - 9½ x 9½ x 9½ in.; CCC 1.4d incubator - 13½ x 13½ x 13½ in.; CCC 2.5d incubator - 17 x 17 x 15 in.



| Cat . No.                                       | Mfr. No. | Description                 | Qty. |
|---|----------|-----------------------------|------|
| <b>CCC 0.5d digital incubator - 0.5 cu. ft.</b> |          |                             |      |
| BO138000  | 138000   | Solid door, 1 shelf         | 1/cs |
| <b>CCC 1.4d digital incubator - 1.4 cu. ft.</b> |          |                             |      |
| BO138200  | 138200   | Solid door, 2 shelves       | 1/cs |
| BO138225  | 138225   | See-through door, 2 shelves | 1/cs |
| <b>CCC 2.5d digital incubator - 2.5 cu. ft.</b> |          |                             |      |
| BO138325  | 138325   | See-through door, 2 shelves | 1/cs |



## Incubator with Digital LCD

BOEKEL - Incubate cultures, test kits, eggs and other biologicals with this general-purpose analog incubator. Designed for storage under low-hanging cabinetry, it features a digital temperature LCD that can be viewed throughout the laboratory. The unit is supplied with an integral shelf, an adjustable shelf and a rugged metal door with a magnetic latch.

### Specifications:

Capacity ..... 0.8 cu. ft.

Shelves supplied ..... 2

Power requirements ..... 115VAC, 90W

### Temperature

Range ..... Ambient +5°C to 60°C

Control ..... ±1°C

### Dimensions (W x D x H)

Chamber ..... 11½ x 12 x 10½ in.

Exterior ..... 13 x 14 x 16¼ in.

| Cat . No. | Mfr. No. | Description                            | Qty. |
|-----------|----------|--|------|
| J1672-1   | 133000   | 0.8 cu. ft. incubator with digital LCD | 1/ea |

## Microplate Incubator

BOEKEL - The heating element in this microplate incubator is located behind a back panel to provide uniform heat and to help eliminate the risk of scorching. The incubator can be used for a wide range of applications, including RIA, EIA, FIA, ELISA, culturing, kinetics, enzymatic incubation, temperature equilibration, hybridoma screening or any other technique that requires incubation at or near 37°C. A Plexiglas® door allows viewing of contents. The ivory Kydex® outer cover and sturdy aluminum interior make cleanup easy. The incubator comes complete with a flat plastic Digitemp® thermometer which is attached to the interior floor.



### Specifications:

Capacity ..... 0.1 cu. ft.

Dimensions (W x D x H) ..... 7¾ x 7⅓ x 6⅔ in.

Power requirements ..... 120VAC, 24W

### Temperature

Range ..... Ambient +5°C to 42°C

Control ..... ±2.0°C

| Cat . No. | Mfr. No. | Description                      | Qty. |
|-----------|----------|----------------------------------|------|
| J1668-1   | 260700   | 0.1 cu. ft. microplate incubator | 1/ea |



## Laboratory Incubator

LW SCIENTIFIC - This incubator features simple PID temperature controls and provides automatic compensation after load changes, setting changes or door opening. Excellent accuracy and natural convection heat distribution combined with the adjustable air vents provides uniformity. Includes adjustable shelves, double doors to allow sample viewing, stainless steel interior and LED digital temperature display.

### Specifications:

Working temperature ..... Ambient + 5°C to 70°C  
Temperature stability ..... + 0.3°C at 37°C, + 0.4°C at 70°C

| Cat. No. | Mfr. No.      | Description                            | Qty. |
|----------|---------------|--|------|
| J1438-1  | ICL-050L-0171 | 50L laboratory incubator (1.7 cu. ft.) | 1/ea |

## Large-Capacity Incubator with Glass Door

NOR-LAKE SCIENTIFIC - This incubator features a digital 4 x 20 character LCD display microprocessor temperature controller, a programmable ramp soak feature and an audible and visual high/low temperature alarm. A variety of features help monitor product integrity:

- Continuous product temperature display
- Air temperature probe with high/low alarms
- An audible and visual high/low temperature, door ajar alarm, sensor failure and power failure alarms
- Two levels of user password protection
- 100-event alarm logging with date/time stamp
- Alarms that signal door ajar and power failure
- Three sensor system, one product, two air



The exterior front, sides and back are painted white. The exterior cabinet top and bottom are galvanized steel. Interior is stainless steel with three solid stainless steel shelves. Complete cabinet is foamed-in-place with CFC free high-density polyurethane foam insulation. Available with full-size, glass door with key lock protection. Four casters (two locking) and two leveling legs.

Available options: chart recorder with chart paper, access port, humidity pan, stainless steel exterior, 4-20 ma output for product temperature, RS-485 communications port, Ethernet 10 baseT control monitoring web card and extra shelves—ask your sales or customer service representative for details.

### Specifications:

Shelf area ..... 14.1 sq. ft.  
Power requirements ..... 115V, 60 Hz, 1 PH  
Temperature range ..... +5°C to 60°C

### Dimensions (W x D x H)

Interior ..... 27.75 x 31 x 67 in.  
Exterior ..... 31.75 x 36.5 x 85.625 in.

| Cat. No.   | Mfr. No.     | Description               | Qty. |
|------------|--------------|---------------------------|------|
| SHI331WSG0 | NSHI331WSG/0 | 33.1 cu. ft. - glass door | 1/ea |

**Cardinal Health** products combine the **clinical effectiveness** you need for your laboratory patients—with the **cost-effectiveness** you require for your bottom line.

# Incubators

## Large-Capacity CO<sub>2</sub> Incubator

NOR-LAKE SCIENTIFIC - This incubator is designed to meet the demanding requirements of scientific and laboratory applications in CO<sub>2</sub> environments. Features a programmable logic microprocessor controller, LCD control panel with message center and a programmable ramp soak feature. The streamlined design helps optimize mechanical convection air flow and temperature uniformity. Incubators have infrared sensor, CO<sub>2</sub> control that is integrated with primary controller, two CO<sub>2</sub> inputs, one CO<sub>2</sub> output and auto CO<sub>2</sub> shutoff upon door opening. Temperature uniformity is ±0.5°C at 37°C.

A variety of features help monitor product integrity, including continuous product temperature display, air temperature probe with high/low alarms, high/low product temperature alarms, two levels of user password protection and 100-event alarm logging with date/time stamp and product temperature. There also are alarms to signal door ajar and power failure.

The exterior front, sides and back are painted white. Interior is stainless steel with three solid stainless steel shelves. Complete cabinet is foamed-in-place with high-density polyurethane foam insulation. Units have leveling legs and are available with full-size solid or glass door with key lock. CO<sub>2</sub> tanks and gas regulator are not included. Supplied with 9 qt. stainless steel humidity pan. UL and CUL listed.

Available options: RH display, internal electrical outlet, extra shelves, access ports, RS485 computer interface and chart recorder.

### Specifications:

Shelf area ..... 14.1 sq. ft.  
Temperature range ..... 5°C above ambient to 70°C  
CO<sub>2</sub> properties ..... 0% to 20% range, ±1% stability  
Inlet pressure ..... 4 to 25 psi

### Dimensions (H x W x D)

Interior ..... 67 x 27¾ x 31 in.  
Exterior ..... 82¾ x 31¾ x 35¾ in.

| Cat. No.          | Mfr. No.      | Description               | Qty. |
|-------------------|---------------|---------------------------|------|
| <b>HI331WSW02</b> | NSHI331WSW/02 | 33.1 cu. ft. - 115V, 60Hz | 1/ea |



## CO<sub>2</sub>/O<sub>2</sub> Laboratory Incubators

PANASONIC - Panasonic models

MCO-5M/19M series CO<sub>2</sub>/O<sub>2</sub> incubators employ multiple sensor technologies to achieve *in vitro* simulation of the *in vivo* environment.

- P.I.D. Control Sophistication offers proportional, integral and derivative infrared CO<sub>2</sub> control accelerates recovery and prevents overshoot
- There are multiple chamber inner doors, which minimize the loss of balanced interior atmosphere during routine door openings (available on selected models)
- Zirconia O<sub>2</sub> Control is a non-depleting design for precise O<sub>2</sub> control with fast response to door openings



MCO-5M model shown

### Specifications:

CO<sub>2</sub> range and variation ..... 0–20% ±0.15  
Temperature range ..... 5°C above ambient to 50°C  
Uniformity ..... ±0.25°C at 25°C

### MCO-5M and MCO-5MUVPA

Shelves ..... 6, 3 standard  
Power requirements ..... 115V, 60hz NEMA 5-15

### Dimensions

Exterior (W x D x H) ..... 18.9 x 21.6 x 22.6 in.  
Interior (W x D x H) ..... 13.8 x 14.9 x 14.8 in.

### MCO-19M, MCO-19MUV, and MCO-19MUVH

Shelves ..... 4 supplied standard, 15 max./chamber  
17 x 17 in. (15.4 lbs. capacity)  
Power requirements ..... 115V, NEMA 5-15

### Dimensions

Exterior (W x D x H) ..... 24.4 x 27.9 x 35.4 in.  
Interior (W x D x H) ..... 19.3 x 20.6 x 26.2 in.

| Cat. No.          | Mfr. No.      | Description   | Qty. |
|-------------------|---------------|---|------|
| <b>MCO-5M</b>     | MCO-5M-PA     | 1.7 cu. ft. - thermal conductivity CO <sub>2</sub> sensor   | 1/ea |
| <b>MCO-5MUVPA</b> | MCO-5MUV-PA   | 1.7 cu. ft. - UV decontamination light, thermal conductivity CO <sub>2</sub> sensor   | 1/ea |
| <b>MCO-19M</b>    | MCO-19M-PA    | 6 cu. ft. - infrared CO <sub>2</sub> sensor with P.I.D/R recovery   | 1/ea |
| <b>MCO-19MUV</b>  | MCO-19MUV-PA  | 6 cu. ft. - UV decontamination light, infrared CO <sub>2</sub> sensor with P.I.D/R recovery   | 1/ea |
| <b>MCO-19MUVH</b> | MCO-19MUVH-PA | 6 cu. ft. - UV decontamination light, infrared CO <sub>2</sub> sensor with P.I.D/R recovery and H <sub>2</sub> O <sub>2</sub> decontamination | 1/ea |



MCO-19AIC model shown

## CO<sub>2</sub> Laboratory Incubators

PANASONIC - All Panasonic CO<sub>2</sub> incubators feature patented Direct Heat and Air Jacket temperature control for accurate, uniform temperature control and InCu-saFe® for continuous contamination control. Panasonic laboratory CO<sub>2</sub> incubators feature selected SafeCell UV with exclusive, patented Active Background Contamination Control.

- InCu-saFe® interior offers copper alloy stainless steel plenums, shelves and brackets which extend contamination control to the chamber interior
- The Sterisonic GxP H<sub>2</sub>O<sub>2</sub> decontamination system limits downtime to less than three hours when total chamber decontamination with verification is desired
- SafeCell UV includes narrow bandwidth ultraviolet decontamination in situ to help reduce air and water pan contamination without downtime
- CO<sub>2</sub> control options are available with high precision, quick recovery infrared or thermal conductivity CO<sub>2</sub> sensor
- Direct Heat and Air Jacket Control is patented, radiant-wall heating microprocessor controlled in three zones to maintain uniformity and optimum humidity

### Specifications:

Chamber .....Single  
Power requirements .....115V, NEMA 5-15

### Dimensions (H x W x D)

#### MCO-5AC

Interior .....13.8 x 14.9 x 14.8 in.

Exterior .....18.9 x 21.6 x 22.6 in.

#### MCO-18AC and MCO-18ACUV—CytoGROW series

Interior .....19.3 x 20.6 x 26.2 in. (per chamber)

Exterior .....24.4 x 27.9 x 35.4 in.

#### MCO-19AIC, MCO19AICVH, MCO19AICUV—Sterisonic GxP

Interior .....19.3 x 20.6 x 26.2 in.

Exterior .....24.4 x 27.9 x 35.4 in.

#### MCO-20AIC

Interior .....24.4 x 20.6 x 26.2 in.

Exterior .....30.3 x 27.9 x 35.4 in.

#### MCO-801C—Reach-in CO<sub>2</sub> incubator

Interior .....31.7 x 27.3 x 60 in.

Exterior .....38.8 x 33.6 x 80.3 in.

| Cat. No.          | Mfr. No.       | Description   | Qty. |
|-------------------|----------------|---|------|
| <b>MCO-5AC</b>    | MCO-5AC-PA     | 1.7 cu. ft. - thermal conductivity CO <sub>2</sub> sensor   | 1/ea |
| <b>MCO-18AC</b>   | MCO-18AC-PA    | 6 cu. ft. - thermal conductivity CO <sub>2</sub> sensor   | 1/ea |
| <b>MCO-18ACUV</b> | MCO-18ACUV-PA  | 6 cu. ft. - UV light decontamination, thermal conductivity CO <sub>2</sub> sensor   | 1/ea |
| <b>MCO-19AIC</b>  | MCO-19AIC-PA   | 6.0 cu.ft - infrared CO <sub>2</sub> sensor with P.I.D/R recovery   |      |
| <b>MCO19AICVH</b> | MCO-19AICVH-PA | 6 cu. ft. - UV decontamination light, infrared CO <sub>2</sub> sensor with P.I.D/R recovery and H <sub>2</sub> O <sub>2</sub> decontamination | 1/ea |
| <b>MCO19AICUV</b> | MCO-19AICUV-PA | 6 cu. ft. - UV decontamination light, infrared CO <sub>2</sub> sensor with P.I.D/R recovery   | 1/ea |
| <b>MCO-20AIC</b>  | MCO-20AIC-PA   | 7.6 cu.ft. - infrared CO <sub>2</sub> sensor with P.I.D/R recovery - single chamber   | 1/ea |
| <b>MCO-801C</b>   | MCO-801C-PA    | 30.1 cu. ft. - infrared CO <sub>2</sub> sensor with P.I.D/R recovery  | 1/ea |

**Excellent selection. Proven performance. Best value.**

# Incubators



## Heated Only Incubators

PANASONIC - Panasonic MIR-Series incubators are recognized as suitable for a wide range of applications that require a temperature range of -10°C to +50°C. Cooled incubator of 126L. The MIR-Series incorporates an 8-bit microprocessor controller for heat and refrigeration control ±0.2°C. Programmable models include three-step functions useful for investigations involving microbiology, plant cell biology and more.

Precise temperature control features:

- High precision microprocessor controller with heater P.I.D. heater control
- Temperature range 5°C above ambient to 80°C
- Temperature accuracy ±0.2°C at +37°C
- Temperature uniformity ±1°C
- Wide temperature range settable for a range of -10°C to +50°C with control to ±0.2°C

Microprocessor controlled timer features:

- Desired start time is set by an automatic start (delay function)
- Information function activates buzzer when set time is over
- Keeps set temperature after operation finishes

### Specifications:

Temperature range ..... (Ambient +5°C) to 80°C

Uniformity ..... ±1°C

Power requirements ..... 115V, 60Hz, 1 phase

### Dimensions (H x W x D)

#### MIR-162

Interior ..... 17.72 x 18.11 x 17.72 in.

Exterior ..... 22.83 x 23.43 x 32.28 in.

#### MIR-262

Interior ..... 23.62 x 20.09 x 19.69 in.

Exterior ..... 28.74 x 25.39 x 34.25 in.

| Cat. No.       | Mfr. No. | Description             | Qty. |
|----------------|----------|-------------------------|------|
| <b>MIR-162</b> | MIR-162  | 3.3 cu. ft. - 2 shelves | 1/ea |
| <b>MIR-262</b> | MIR-262  | 5.4 cu. ft. - 3 shelves | 1/ea |



## Refrigerated Incubators/Environmental Testing Chambers

PANASONIC - Panasonic's MIR series incubators are suitable for a wide range of applications requiring a -10°C to +60°C environment. The wide variety of temperatures, humidity and lighting patterns that are essential in research, environmental studies and testing can now be accurately reproduced and controlled. Features secure, comprehensive alarm systems.

MIR environmental test chambers/refrigerated incubators are ideal in testing applications such as:

- Industrial testing in the electrical, machinery and textiles industries
- Chemical testing (e.g., storage, stability, acid/alkali, durability)
- Packaging, quality control and stability in the food industry
- Testing for waste water, BOD, soil testing
- Microorganism culturing
- Germination experiments

### Specifications:

Temperature range ..... -10°C to +60°C

Uniformity ..... ±0.5°C at 37°C

Power requirements ..... 115V, 60Hz, 1 phase

### Dimensions (H x W x D)

#### MIR-154

Interior ..... 24.4 x 15.2 x 21.9 in.

Exterior ..... 27.6 x 22.8 x 40.1 in.

#### MIR-254

Interior ..... 24.4 x 15.2 x 42.3 in.

Exterior ..... 27.6 x 22.8 x 63.7 in.

#### MIR-554

Interior ..... 25.17 x 21.65 x 45.68 in.

Exterior ..... 31.5 x 32.75 x 71.3 in.

| Cat. No.       | Mfr. No. | Description              | Qty. |
|----------------|----------|--------------------------|------|
| <b>MIR-154</b> | MIR-154  | 4.3 cu. ft. - 3 shelves  | 1/ea |
| <b>MIR-254</b> | MIR-254  | 8.4 cu. ft. - 5 shelves  | 1/ea |
| <b>MIR-554</b> | MIR-554  | 14.3 cu. ft. - 5 shelves | 1/ea |



### Bactron Anaerobic Chambers

**SHELDON MFG** - The Bactron anaerobic environmental chamber is designed to allow efficient and dexterous glove-free handling and inspection of samples. Modular systems within the Bactron anaerobic chamber facilitate the completion of procedures from unpacking material to inoculation, incubation, inspection and recovery—all without exposure to oxygen. Chamber stands are available separately.

| Cat. No.          | Mfr. No. | Description                                  | Qty. |
|-------------------|----------|--|------|
| <b>SS-BACB</b>    | BACB     | BacBASIC anaerobic chamber and incubator     | 1/ea |
| <b>SS-BAC1</b>    | BAC1     | Bactron I - 100-plate capacity incubator     | 1/ea |
| <b>SS-BAC2</b>    | BAC2     | Bactron II - 200-plate capacity incubator    | 1/ea |
| <b>SS-BAC3</b>    | BAC3     | Bactron III - 300-plate capacity incubator   | 1/ea |
| <b>SS-BAC4</b>    | BAC4     | Bactron IV - 600-plate capacity incubator    | 1/ea |
| <b>SS-BAC4900</b> | BAC4900  | Bactron IV900 - 900-plate capacity incubator | 1/ea |



### SHEL LAB® CO<sub>2</sub> Incubators

**SHELDON MFG** - These incubators are an economical choice while still providing quality and precision. They feature a PID microprocessor controller, gentle mechanical air convection and a heated outer door and tempered-glass inner door that combine for exceptional temperature uniformity. Helps to minimize cold spots that can lead to condensation (and ultimately sample contamination). The extremely stable temperature environment maintains constant humidity through evaporation up to 95%.

All systems include 3 shelves (6 max) and several safety backups. Audible/visual alarms for temperature and CO<sub>2</sub> respond when temperature or CO<sub>2</sub> exceeds 0.1%/1%. They offer an independent over temperature safety control to protect samples from overheating. Reduced footprint allows incubators to fit into tight spaces.

#### Specifications:

CO<sub>2</sub> range ..... 0% to 20%  
 Recovery rate at 5% ..... <5 min.  
 Power requirements ..... 120V, 550W, 5A

#### Temperature

Range ..... Ambient +8°C to 60°C  
 Uniformity ..... ±0.2°C at 37°C

#### Dimensions (W x D x H)

##### **SS-2406A**

Interior ..... 20 x 20 x 25 in.  
 Exterior ..... 26 x 26 x 40 in.

##### **SS-24062**

Interior ..... 20 x 20 x 25 (x2) in.  
 Exterior ..... 26 x 26 x 80 in.

| Cat. No.        | Mfr. No. | Description                  | Qty. |
|-----------------|----------|------------------------------|------|
| <b>SS-2406A</b> | 2406     | 6.7 cu. ft. - single chamber | 1/ea |
| <b>SS-20462</b> | 2046/2   | 6.7 cu. ft. - double chamber | 1/ea |



Our focus is on  
your lab.

# Incubators

## Incubators

### SHEL LAB® CO<sub>2</sub> Air Jacketed Incubator

SHELDON MFG - This incubator was designed to minimize contamination and be operational within hours of installation. This slim, lightweight incubator is easily repositioned with minimal downtime and is well-suited for multiple users. Three temperature control settings (main chamber, external door and front liner) minimize condensation and yield precise temperature uniformity with no unwelcome temperature gradients. The unique HEPA filtration system removes 99.97% of all airborne microbes and isolated particulates 0.3 microns or larger. The patented copper housing around the filter is designed to destroy microbes entrapped in the filter.



Additional anti-contamination features include a stainless steel chamber with easy-to-clean coved corners, a Quick Clean Shelf System that disassembles without tools in less than a minute and Non-Tip Shelf System to reduce spills.

#### Specifications:

CO<sub>2</sub> Range ..... 0-20%  
Recovery rate at 5% ..... <5 minutes

#### Temperature

Range ..... Ambient +8°C to 60°C  
Uniformity ..... ±0.25°C at 37°C

#### Dimensions (W x D x H)

Interior ..... 20.5 x 19.7 x 21.5 in.  
Exterior ..... 27.3 x 28 x 37.8 in.

| Cat. No. | Mfr. No. | Description                | Qty. |
|----------|----------|----------------------------|------|
| SS-5215  | 5215     | 5 cu. ft. - 120V, 50/60 Hz | 1/ea |



### SHEL LAB® Laboratory Incubators

SHELDON MFG - These general-purpose incubators deliver temperature uniformity usually found in more expensive, application-specific models. This high level of performance is due to a precise microprocessor controller and a unique warm air-jacket design. Triple-wall construction allows heated air to circulate within an open plenum between the inner chamber and exterior walls. This design requires no blowers or fans within the incubator chamber where samples are susceptible to cross-contamination and the drying effects of convection.

Five strategically placed heating elements, including a heated outer door, help ensure uniform heating, even when the incubator chamber is fully loaded. Independent over temperature protection helps ensure over temperature safety. Each incubator includes an interior outlet, a tempered safety glass door and an access port.

#### Specifications:

#### Temperature

Range ..... Ambient +8°C to 70°C  
Uniformity ..... ±0.35°C at 37°C

#### Dimensions (W x D x H)

**SS-GI2, SS-GI2-2**  
Interior ..... 15 x 15 x 15.6 in.  
Exterior ..... 22 x 22 x 27 in.

**SS-GI6, SS-GI6-2**  
Interior ..... 19.5 x 20 x 26 in.  
Exterior ..... 25.3 x 27.3 x 38 in.

**SS-GI7, SS-GI7-2**  
Interior ..... 23.7 x 24 x 20 in.  
Exterior ..... 30 x 31.7 x 32.2 in.

**SS-GI11, SS-GI11-2**  
Interior ..... 36.2 x 20 x 25.7 in.  
Exterior ..... 42.5 x 27 x 38 in.

**SS-GI12, SS-GI12-2**  
Interior ..... 19.5 x 20 x 26 in.  
Exterior ..... 25.3 x 27.3 x 76 in.

| Cat. No.  | Mfr. No. | Description                                | Qty. |
|-----------|----------|--|------|
| SS-GI2    | GI2      | Bench top 2.0 cu. ft. - 110-120V           | 1/ea |
| SS-GI2-2  | GI2-2    | Bench top 2.0 cu. ft. - 220-230V           | 1/ea |
| SS-GI6    | GI6      | Floor model 5.9 cu. ft. - 110-120V         | 1/ea |
| SS-GI6-2  | GI6-2    | Floor model 5.9 cu. ft. - 220-230V         | 1/ea |
| SS-GI7    | GI7      | Under counter 6.6 cu. ft. - 110-120V       | 1/ea |
| SS-GI7-2  | GI7-2    | Under counter 6.6 cu. ft. - 220-230V       | 1/ea |
| SS-GI11   | GI11     | Double doors 10.8 cu. ft. - 110-120V       | 1/ea |
| SS-GI11-2 | GI11     | Double doors 10.8 cu. ft. - 220-230V       | 1/ea |
| SS-GI12   | GI12     | Dual/stacked 5.9 (each) cu. ft. - 110-120V | 1/ea |
| SS-GI12-2 | GI12-2   | Dual/stacked 5.9 (each) cu. ft. - 220-230V | 1/ea |



## SHEL LAB® Large-Capacity Incubators

**SHELDON MFG** - These incubators provide extra-large capacities while minimizing the amount of floor space used. They incorporate a microprocessor controller to achieve precise temperature uniformity and an independent secondary temperature controller offers the added security of over temperature protection. A forced-air circulation system creates a one-pass circulation pattern that provides both exceptional temperature uniformity and rapid heat recovery.

Incubators have a single chamber with a powder-coated white interior and include a tempered glass-viewing window in the door, a prewired panel for chart recorder hookup and four interior electrical outlets. Chamber floors are ruggedly reinforced to support roller apparatus or shakers. Each incubator is supplied with six sturdy shelves that are designed not to sag or bend under heavy loads.

### Specifications:

#### Temperature

Range ..... Ambient +8°C to 70°C

Uniformity..... ±0.8°C at 37°C

#### Dimensions (W x D x H)

##### SS-RI28, SS-RI28-2

Interior ..... 32.3 x 26 x 63.5 in.

Exterior..... 38.5 x 34 x 75.3 in.

##### SS-RI40, SS-RI40-2

Interior ..... 35 x 26 x 73 in.

Exterior..... 43 x 34 x 87.5 in.

| Cat. No.         | Mfr. No. | Description             | Qty. |
|------------------|----------|-------------------------|------|
| <b>SS-RI28</b>   | RI28     | 30.8 cu. ft. - 110-120V | 1/ea |
| <b>SS-RI28-2</b> | RI28-2   | 30.8 cu. ft. - 220-230V | 1/ea |
| <b>SS-RI40</b>   | RI40     | 38.4 cu. ft. - 110-120V | 1/ea |
| <b>SS-RI40-2</b> | RI40-2   | 38.4 cu. ft. - 220-230V | 1/ea |



## SHEL LAB® Large-Capacity CO<sub>2</sub> Incubators

**SHELDON MFG** - These large-capacity incubators have an extremely stable environment that maintains constant humidity through evaporation up to 95%. They feature a heated outer door, a glass inner door, a PID microprocessor controller and gentle mechanical air convection that provide exceptional temperature uniformity. Helps to minimize cold spots that can lead to condensation (and ultimately sample contamination). Incubators also feature chamber floors specifically designed for easy movement of roller bottle apparatus.

Each incubator is supplied with four 1A interior electrical outlets and six shelves. Safety backups include audible/visual alarms that respond when temperature or CO<sub>2</sub> exceed ±0.1°/1%, over temperature safety controls.

### Specifications:

CO<sub>2</sub> range..... 0% to 20%

Recovery rate at 5%..... <5 min. (SS-2428, SS-2428-2)

<3 min. (SS-2440, SS-2440-2)

#### Temperature

Range ..... Ambient +8°C to 60°C

Uniformity..... ±0.5°C at 37°C

#### Dimensions (W x D x H)

##### SS-2428, SS-2428-2

Interior ..... 32 x 26 x 63 in.

Exterior..... 40 x 34 x 76 in.

##### SS-2440, SS-2440-2

Interior ..... 34 x 26 x 75 in.

Exterior..... 43 x 35 x 87 in.

| Cat. No.         | Mfr. No. | Description                   | Qty. |
|------------------|----------|-------------------------------|------|
| <b>SS-2428</b>   | 2428     | 31 cu. ft. - 120V, 1800W, 15A | 1/ea |
| <b>SS-2428-2</b> | 2428-2   | 31 cu. ft. - 240V, 2200W, 10A | 1/ea |
| <b>SS-2440</b>   | 2440     | 40 cu. ft. - 120V, 1800W, 15A | 1/ea |
| <b>SS-2440-2</b> | 2440-2   | 40 cu. ft. - 240V, 2200W, 10A | 1/ea |

# Microscopes and Accessories

## Microscopes

### Economy Monocular Microscope

C & A SCIENTIFIC CO INC - This research microscope offers the same optics as larger professional scopes with ball-bearing movements in focusing and stage systems to help ensure long life, reliability and accuracy. Complete with standard popular accessories. Contemporary body design includes plastic plating over the metal base for less heat conduction, more comfort for the user.

| Cat. No. | Mfr. No. | Description                  | Qty. |
|----------|----------|------------------------------|------|
| MRJ-01   | MRJ-01   | Economy monocular microscope | 1/ea |

### Pricing

Please call your sales or customer service representative to check up-to-the-minute pricing and availability.

### Infinity Microscope

C & A SCIENTIFIC - Design features include an ergonomic body, wide mechanical stage that can hold two slides and a forward mounted-pull hatch condenser for easier lightbulb changes. The external adapter and quality objectives offer the user more convenient operating space and better observation effects with a large 22mm field of view. The high-intensity illumination system and Infinity Color Corrected Optics System (ICS) help ensure high clearance and intensity in images.



| Cat. No. | Mfr. No. | Description        | Qty. |
|----------|----------|--------------------|------|
| MIS-6000 | MIS-6000 | Infinity binocular | 1/ea |

### Premiere® MRJ-03 Professional Binocular Microscopes

C & A SCIENTIFIC - Featuring a 30° binocular head, these research microscopes are designed to meet the demands of modern laboratory microscopy. They offer ball-bearing movements in focusing and stage systems for long life, reliability and accuracy. Contemporary body design includes plastic plating over the metal base for less heat conduction and more user comfort. Microscope MRJ-03L includes a variable-intensity 5.5V LED cool illumination system and a built-in rechargeable battery with detachable AC. Microscope MRJ-03D is a dual-view microscope designed for one-on-one teaching. It has two binocular heads with slide-type interpupillary adjustment and 10X wide-field eyepieces. Supplied with replacement bulb and fuse (except Microscope MRJ-03L) and immersion oil.

#### Specifications:

|                     |   |
|---------------------|---|
| Head .....          | 30° inclined binocular Seidentopf-type head, 360° rotatable   |
| Eyepiece .....      | Two 10X wide-field eyepieces  |
| Objectives .....    | 4 DIN achromatic parfocal and parlefted objectives: 4X (N.A. 0.10), 10X (N.A. 0.25), 40XR (N.A. 0.65), 100XR (oil immersion, N.A. 1.25) |
| Magnification ..... | 40X to 1,000X   |
| Focusing .....      | Coaxial coarse/fine with low knob position  |
| Diaphragm .....     | Iris diaphragm with filter holder and blue filter   |
| Condenser .....     | Abbe condenser N.A. 1.25  |



Stage.....4 $\frac{7}{8}$  x 4 $\frac{15}{16}$  in. (124 x 125mm) mechanical stage with coaxial drive/rack and pinion adjustment

Illumination .....Variable-intensity halogen lamp, 6V, 20W

Dimensions (L x W x H) ....6 $\frac{1}{2}$  x 8 $\frac{1}{4}$  x 15 in.

| Cat. No. | Mfr. No. | Description            | Qty. |
|----------|----------|------------------------|------|
| MRJ-03   | MRJ-03   | Standard model         | 1/ea |
| MRJ-03D  | MRJ-03D  | With dual-view feature | 1/ea |
| MRJ-03L  | MRJ-03L  | With LED light system  | 1/ea |

# Microscopes and Accessories

## Microscopes



MRP-3000



MRP-3000D



MRP-5000



MRP-5000D

### Premiere® MRP-3000 Professional Binocular Microscopes

C & A SCIENTIFIC - These high-quality professional microscopes have a 30° binocular head and incorporate a wide range of sophisticated features. The objectives face backward for more space. The metal base is covered with plastic plating for less heat conduction and more user comfort. The field diaphragm adjustment is built into the illuminator and offers Koehler illumination for more lighting control options. Models include spring-loaded slide holder, field diaphragm, focusing stop to protect objectives and slides from damage and stage with coaxial drive and low-knob position.

Choose from standard and dual-view models. Dual-view microscope MRP-3000D is designed for one-on-one teaching. It has two binocular heads with slide-type interpupillary adjustment and 10X wide-field eyepieces. All models are supplied with replacement bulb, fuse and immersion oil.

#### Specifications:

|                                   |  |
|-----------------------------------|--|
| Head .....                        | 30° inclined binocular Seidentopf head,<br>360° rotatable  |
| Interpupillary distance adj. .... | 55 to 75mm   |
| Eyepiece.....                     | Two 10X wide-field eyepieces   |
| Objectives.....                   | 4 DIN achromatic parfocal and<br>parcentered objectives: 4X (N.A. 0.10),<br>10X (N.A. 0.25), 40X (N.A. 0.65), 100X<br>(oil immersion, N.A. 1.25) |
| Magnification.....                | 40X to 1,000X  |
| Focusing.....                     | Coaxial coarse/fine tension controls   |
| Diaphragm .....                   | Iris diaphragm with blue filter  |
| Condenser.....                    | Abbe condenser N.A. 1.25 with rack and<br>pinion adjustment  |
| Stage.....                        | 140 x 135mm graduated mechanical<br>stage, 45 x 80mm range of travel   |
| Illumination .....                | Variable-intensity halogen lamp, 6V, 20W   |
| Dimensions (L x W x H) .....      | 7 x 9 x 15 in.   |

| Cat. No.         | Mfr. No.  | Description            | Qty. |
|------------------|-----------|------------------------|------|
| <b>MRP-3000</b>  | MRP-3000  | Standard model         | 1/ea |
| <b>MRP-3000D</b> | MRP-3000D | With dual-view feature | 1/ea |

### Premiere® MRP-5000 Professional Binocular Microscopes

C & A SCIENTIFIC - Designed for extensive use in clinical and research laboratory settings, these microscopes feature five backward-mounted objectives and an interchangeable condenser system, which applies to bright-field, phase-contrast and dark-field techniques. The mechanical stage knob is placed low on the base, offering comfort for extended use. Models include spring-loaded slide holder, field diaphragm for more light control and focusing stop to help protect objectives and slides from damage.

Choose standard and dual-view models. Dual-view microscope MRP-5000D is designed for one-on-one teaching. It has two binocular heads with slide-type interpupillary adjustment and 10X wide-field eyepieces. All models are supplied with dust cover, replacement bulb, fuse and immersion oil.

#### Specifications:

|                                   |   |
|-----------------------------------|---|
| Head .....                        | 30° binocular Seidentopf head,<br>360° rotatable  |
| Interpupillary distance adj. .... | 55 to 75mm  |
| Eyepiece.....                     | Two 10X wide-field eyepieces  |
| Objectives .....                  | 5 DIN achromatic parfocal and<br>parcentered objectives: 4X (N.A. 0.10),<br>10X (N.A. 0.25), 40XR (N.A. 0.65), 60XR<br>(N.A. 0.90), 100XR oil (N.A. 1.25) |
| Magnification.....                | 40X to 1,000X   |
| Focusing.....                     | Coaxial coarse/fine tension controls  |
| Diaphragm .....                   | Iris diaphragm with blue filter   |
| Condenser.....                    | Abbe condenser N.A. 1.25 with rack and<br>pinion adjustment   |
| Stage.....                        | 140 x 135mm graduated mechanical<br>stage, 40 x 80mm range of traverse  |
| Illumination .....                | Variable-intensity halogen lamp, 6V, 20W  |
| Dimensions (L x W x H) .....      | 10 x 8 x 16½ in.  |

| Cat. No.         | Mfr. No.  | Description            | Qty. |
|------------------|-----------|------------------------|------|
| <b>MRP-5000</b>  | MRP-5000  | Standard model         | 1/ea |
| <b>MRP-5000D</b> | MRP-5000D | With dual-view feature | 1/ea |

# Microscopes and Accessories

## Microscopes

### Premiere® Stereo Zoom Microscope

C & A SCIENTIFIC - With this versatile 3-dimensional microscope, you can bring the specimen into focus and then change the magnification to suit your needs without refocusing. There are horizontal zoom controls at each side of the head.



#### Specifications:

|                                  |  |
|----------------------------------|--|
| Head .....                       | 45° inclined binocular observation tubes, 360° rotatable   |
| Eyepiece.....                    | 10X wide-field eyepieces with rubber eye guards  |
| Interpupillary distance adj..... | 55 to 77mm   |
| Objectives.....                  | 1X to 4X   |
| Magnification.....               | 10X to 40X   |
| Field of view .....              | 5.5 to 23mm dia.   |
| Working distance .....           | 85mm   |
| Illumination .....               | Halogen transmitted illuminator under 75mm frosted glass stage plate; halogen incident (top) illumination, 20W |
| Size (L x W) .....               | 6 3/4 x 9 1/2 in.  |

| Cat. No.      | Mfr. No. | Description    | Qty. |
|---------------|----------|----------------|------|
| <b>SMZ-02</b> | SMZ-02   | Standard model | 1/ea |

### JC-Series Microscopes

JENCO INTL. - Utilizing the latest in optical design, JC-Series microscopes incorporate infinity planachromatic objectives to deliver brilliant, flat images on a modular frame that expands to perform multiple techniques. Features a light drawer for easy bulb changes, adjustable height focus knobs combined with low positioned stage control for user comfort and integrated carrying handle, improving portability. Its wide base protects focus knobs from damage while adding stability and resisting vibration. Add the 50X oil objective onto the five-hole turret when doing Diffs. Modular expansions include epifluorescence and more. The polarization model for crystal examination includes first order full wave polarization while the phase contrast models make semitransparent specimens like bacteria easier to identify. 5-year warranty.



### CP-Series Upright Compound Microscopes

JENCO INTL. - These rugged, affordable compound microscopes are easy to use and feature a focus stop to protect objective and specimen, with durable all metal focus/stage mechanism and frame for reliable, everyday use. Ideal for clinics and basic research, they have antifungal agents and glass condensers with iris diaphragm to provide image contrast. High-quality, E-planachromatic objectives offer sharp images of the entire field. The focus mechanism's adjustable tension control knob prohibits drift and its integrated handle makes it easy to move. Choose from monocular, binocular and trinocular (for camera attachment) models. Supplied with spare halogen lamp and fuse, immersion oil and dust cover.



#### Specifications:

|                    |  |
|--------------------|--|
| Head .....         | 30° inclination, 360° rotation, Seidentopf with 50 to 75mm interpupillary adjustment |
| Eyepieces.....     | 10X wide-field, field no. 20mm   |
| Objectives .....   | Brightfield infinity eplanachromat 4X, 10X, 40X, 100XR (oil)                         |
| Nosepiece .....    | Reversed, four position ball-bearing   |
| Stage.....         | Mechanical with vernier scale, 5.5 x 5.6 in.   |
| Condenser.....     | 1.25 N.A., two element abbe with iris diaphragm and rack-and-pinion focusing         |
| Illumination ..... | .6V/20W halogen bulb with electronic dimmer, Kohler type                             |

| Cat. No.       | Mfr. No. | Description           | Qty. |
|----------------|----------|-----------------------|------|
| <b>CP-301S</b> | CP-301S  | Monocular microscope  | 1/ea |
| <b>CP-302S</b> | CP-302S  | Binocular microscope  | 1/ea |
| <b>CP-303S</b> | CP-303S  | Trinocular microscope | 1/ea |

#### Specifications:

|                          |   |
|--------------------------|---|
| Head .....               | 30° inclination, 360° rotation, Seidentopf with 48 to 75mm interpupillary adjustment      |
| Eyepieces.....           | 10X wide-field, field no. 22mm  |
| Objectives .....         | Brightfield infinity planachromat 4X, 10X, 40X, 100XR (oil)                               |
| Nosepiece .....          | Reversed, four/five position ball-bearing   |
| Stage.....               | Mechanical, vernier scale, 5.5 x 6.25 in.   |
| Condenser.....           | 1.25 N.A., two element abbe with iris diaphragm, rack-and-pinion focusing and color-coded |
| Kohler illumination..... | .6V/20W halogen bulb with electronic dimmer   |

| Cat. No.                | Mfr. No. | Description   | Qty. |
|-------------------------|----------|---|------|
| <b>JC-211</b>           | JC-211   | Binocular   | 1/ea |
| <b>JC-221</b>           | JC-221   | Binocular phase contrast                                      | 1/ea |
| <b>JC-2PL</b>           | JC-2PL   | Binocular polarization  | 1/ea |
| <b>JC-311</b>           | JC-311   | Trinocular  | 1/ea |
| <b>JC-3PL</b>           | JC-3PL   | Trinocular polarization                                       | 1/ea |
| <b>Objective lenses</b> |          |   |      |
| <b>OP-050</b>           | OP-050   | 50XR (oil) brightfield semiplan achromatic objective, NA 0.95 | 1/ea |
| <b>OP-100</b>           | OP-100   | 100XR (oil) plan achromatic objective, NA 1.25                | 1/ea |

# Microscopes and Accessories

## Microscopes

### ZM-500-Series Stereo Microscope

JENCO INTL. - Utilize this microscope's large stage for dissection or observation of macro specimens. It allows ample room for sample manipulation on a stand small enough to fit in a storage cabinet. Illuminated stands let you choose light from above, below or both to help observe opaque and transparent samples. Total magnification ranges from 7.5X to 35X at a 4:1 ratio. Features fluorescent/halogen illumination and all-metal focusing mechanisms to stand up to daily use. Supplied with dust cover, eyeguards, tension control wrench and instruction manual.



### Achiever Stereoscope

LW SCIENTIFIC - Choose this stereoscope for impressive image capabilities teamed with years of reliable performance. Ideal for students or hobbyists, its crisp 3-D optics, dual illumination and large viewing area are excellent for dissecting and inspecting. Built tough to withstand daily use, with an aluminum alloy construction and acid- and reagent-resistant finish.

#### Specifications:

Head ..... 45° inclination, 360° rotation  
Eyepieces ..... 10X/20X wide-field  
Magnification ..... 10X/30X  
Focusing ..... Helical rack and pinion, with tension adjustment and slip clutch  
Stage ..... Frosted glass plate, 75mm dia.  
Illumination ..... 5W fluorescent top and bottom, with dual independent rocker switches  
Dimensions (L x W x H) ..... 9 x 6.5 x 12.8 in.  
Power requirements ..... 110VAC, 2A fuse

| Cat. No. | Mfr. No.      | Description                  | Qty. |
|----------|---------------|------------------------------|------|
| M8000-38 | DMM-S13N-FA77 | 10X/30X Achiever stereoscope | 1/ea |

### i4: 4 Objective Infinity Microscopes

LW SCIENTIFIC - The i4 modular series microscopes feature exceptional optical quality and expandability for top-notch performance in the lab. Use the rotating head to adjust the height for taller users. Infinity Plan optics with a 30-year antifungal coating match quality with value. The i4 microscope provides comfort, durability, dependability and superior imaging for the lifetime of the laboratory. LED illumination. 4X, 10X, 40X, 100X (oil) objectives.



#### Specifications:

Head ..... Inclined 30°, rotates 360°  
Eyepiece ..... 10X/18X eyepieces  
Illumination ..... Variable LED "daylight" long-life light source  
Dimensions (H x L x W) ..... 14.1 x 10.7 x 6 in.

| Cat. No. | Mfr. No.      | Description                                     | Qty. |
|----------|---------------|---|------|
| M8000-81 | I4M-B04A-IPL3 | Binocular head - Infinity Plan objectives       | 1/ea |
| M8000-80 | I4M-T04A-IPL3 | Trinocular head - Infinity Plan objectives      | 1/ea |
| M8000-78 | I4M-B04A-ISL3 | Binocular head - Infinity SEMI-Plan objectives  | 1/ea |
| M8000-79 | I4M-T04A-ISL3 | Trinocular head - Infinity SEMI-Plan objectives | 1/ea |

### Revelation® III Microscopes

LW SCIENTIFIC INC - Equipped for performance, these microscopes have titanium-finished DIN achromatic or plan optics (4X, 10X, 40X, 100X oil) and an antifungal coating. They also feature coarse adjustment with a range of 30mm and fine adjustment with a graduation of 2μ. Microscope includes three 0.5 amp fuses, mirror attachment (for field use), blue and green filters, dust cover, immersion oil, spare bulb and manual.



#### Specifications:

Head ..... Inclined 30°, rotates 360°  
Eyepiece ..... 10X/18X wide-field eyepieces  
Objectives ..... 4X, 10X, 40X, 100X  
Illumination ..... Variable LED light source  
Dimensions ..... 15 x 9 x 7 in.

| Cat. No.  | Mfr. No.      | Description                                  | Qty. |
|-----------|---------------|--|------|
| M8000-19  | R3M-BN4A-DAL3 | Binocular head - achromatic objectives, LED  | 1/ea |
| M8000-17  | R3M-D04A-DAH3 | Dual binocular head - halogen                | 1/ea |
| M8000-18  | R3M-TN4A-DAL3 | Trinocular head - achromatic objectives, LED | 1/ea |
| M8000-112 | R3M-BN4A-DPL3 | Binocular head - DIN Plan objectives, LED    | 1/ea |

# Microscopes and Accessories

## Microscopes

### Vision® Stereo Microscope

LW SCIENTIFIC - The Vision® is an industrial-grade, dual-magnification stereo microscope designed for hands-under operation. The long working distance and extra-wide field of view make ultrafine details easy to detect and manipulate. Variable halogen light and a wide base give your workspace plenty of flexibility. The objectives rotate internally with a convenient control knob. This is an economical choice where superior optical quality is a must, but zoom capability is not required.



#### Specifications:

|                              |  |
|------------------------------|--|
| Head .....                   | Binocular, inclined 45°, rotates 360°  |
| Eyepiece.....                | 10X/22 wide field high point eyepieces with rubber eyeguards                                   |
| Magnification.....           | 10X/20X  |
| Illumination .....           | Variable 20W halogen incident and 5W fluorescent bottom, with dual independent rocker switches |
| Dimensions (H x L x W) ..... | 15 x 11 x 8 in.  |

| Cat. No.        | Mfr. No.      | Description                        | Qty. |
|-----------------|---------------|------------------------------------|------|
| <b>M8000-37</b> | VSM-S12N-7FH1 | 10X/20X stereoscope with pole base | 1/ea |

### CxL2 Compound Microscope

MICROSCOPTICS - Adapted for classroom and lab environments, the new CxL2 Compound Microscope reflects a fresh design and delivers a rugged exterior with quality optical and mechanical ingredients for a lifetime of carefree use. This next generation microscope asserts its sophistication not only by design, but also through flawless functionality. In light of the latest in manufacturing technology, the highly modular CxL2 can offer a high degree of performance for various applications.



The LP series objectives enable you to view an assortment of specimens with the highest degree of clarity. CxL's Semi Plan Achromatic optical system has been designed to provide true color and contrast. With a compact design and robust mechanical stage with fluid X/Y operation, maintenance, free operation is a standard. CxL2 offers flexibility in illumination. The bright LED provides illumination in a near daylight spectrum.

| Cat. No.       | Mfr. No. | Description         | Qty. |
|----------------|----------|---------------------|------|
| <b>M6000-2</b> | 9144006  | Compound microscope | 1/ea |

### Lx 500 Ergo Compound Microscope

MICROSCOPTICS – Lx 500 is the outcome of a combination of world-class technology and design innovation. Lx 500 is a versatile and fully extendable research microscopy system, with its feature rich standard configuration and a host of accessories.



With 0-25° of arc, the ergonomic tilting viewing body brings the image to you at your idyllic head position. All optical surfaces are treated with high efficiency anti-fungus coatings.

Lx 500's ceramic stage and dual specimen holder allows for the user to peruse thousands of slides without degradation of the stage's surface. The rackless stage design is compact and provides ultra-smooth traverse. MAXlite™ coated Antifungal Infinity corrected optical system. With its 6V 30W True Köhler illumination system and a rear mounted bulb, Lx 500 provides coolest light and highest contrast. The double layer bulb housing provides lowest heat emission making the system comfortable to use.

| Cat. No.       | Mfr. No. | Description              | Qty. |
|----------------|----------|--------------------------|------|
| <b>M6000-9</b> | 9144000  | Ergo compound microscope | 1/ea |

### AE2000 Inverted Phase Microscope

MOTIC INSTRUMENTS - This microscope combines infinity corrected CCIS optics with ergonomic features to provide clean and crisp images with minimal operator fatigue. It includes an easy-to-use phase standard 10X, 20X phase, with a 40X phase contrast option. Illumination is provided by a 6V/30W quartz halogen lamp. The revolving side facing nosepiece accepts four objectives. It runs on ball-bearings and has internal click stops so that the image remains centered after each change of magnification. The interpupillary distance is 50 to 75mm. They are equipped with centerable phase sliders with phase ring of Ph 1±2, optional PH40x, a centering telescope for use with the phase slider and a green filter.



#### Specifications:

|                    |   |
|--------------------|---|
| Head .....         | 45° inclination   |
| Eyepiece.....      | Wide-field high-eyepoint 10X, paired, 20mm field of view, with diopter adjustment |
| Objectives .....   | CCIS infinity objectives: phase 10X, 20X, plan 4X, 40X                            |
| Nosepiece .....    | Quad, side-facing type  |
| Focusing.....      | Coaxial coarse and fine focusing  |
| Condenser.....     | ELWD N.A. 0.30  |
| Stage.....         | Plain stage, 200 x 260mm, 207mm height from table                                 |
| Illumination ..... | 6V/30W halogen prelefted lamp   |

| Cat. No.         | Mfr. No.      | Description                         | Qty. |
|------------------|---------------|-------------------------------------|------|
| <b>M8100-134</b> | 1100103800042 | Binocular inverted phase microscope | 1/ea |

# Microscopes and Accessories

## Microscopes



### Motic® B1-Series and DMB1-223ASC Biological Microscopes

MOTIC INSTRUMENTS - Designed for clinical examination and teaching demonstration, the B1-series offers research-quality microscopes at an affordable price. This is also an ideal instrument for biological, bacteriological-organic, pathological and pharmaceutical research.

Microscope M8100-7 features a high-resolution  $\frac{1}{2}$  in. CCD camera. This model provides both digital and analog output. The analog signal is provided by a  $\frac{1}{2}$  in. CCD with a resolution of 480 TV lines. The digital signal is provided by a  $\frac{1}{4}$  in. CCD with a resolution of 640 x 480 pixels. A built-in grabber converts analog to digital signal. Motic Images 2.0 ML software is provided for user-friendly image processing and analyzing for PC and Mac. Includes USB, RCA and S-video cables.

#### Specifications:

|                    |  |
|--------------------|--|
| Head .....         | Binocular, inclined 45° and 360° rotating  |
| Eyepiece.....      | Wide-field 10X, paired, 18mm field of view   |
| Objectives .....   | Plan 4X/0.10, achromatic 40X/0.10, A10X/0.25, A40X/0.65 (spring-loaded), A100X/1.25 (oil, spring-loaded) |
| Nosepiece .....    | Quadruple, ball-bearing type   |
| Focusing.....      | Coaxial coarse and fine focusing adjustment  |
| Stage.....         | Built-in, low-position coaxial mechanical stage  |
| Condenser.....     | Focusable 1.25 N.A. Abbe condenser (rack and pinion type)  |
| Diaphragm .....    | Iris diaphragm with filter holder (32mm blue filter included)  |
| Illumination ..... | Built-in halogen illumination, 12V/20W, with intensity control   |

| Cat. No.        | Mfr. No.      | Description                    | Qty. |
|-----------------|---------------|--------------------------------|------|
| <b>M8100-11</b> | 1100100500201 | B1-220ASC binocular microscope | 1/ea |
| <b>M8100-7</b>  | 1100400800111 | DMB1-223ASC digital microscope | 1/ea |



### Motic® B3-Series and DMB3-Series Professional Biological Microscopes

MOTIC INSTRUMENTS - Designed for professional applications, the B3-series microscopes come in several configurations. A slot-in type centerable condenser provides extra stability and flexibility for laboratory applications. A powerful 12V/20W halogen light makes it easy to observe difficult or light absorbing specimens. A reversed quintuple nosepiece moves precisely on ball bearings. The precise graduation on the low-position coaxial control mechanical stage allows quick marking and makes it easy to find specific parts of your slide.

Motic Images 2.0ML software is provided for user-friendly image processing and analyzing for PC and Mac. Includes USB, RCA and S-video cables.

#### Specifications:

|                    |   |
|--------------------|---|
| Head .....         | Inclined 30° and 360° rotating  |
| Eyepiece.....      | Wide-field 10X, paired, 20Xmm field of view                           |
| Objectives .....   | 4X, 10X, 40X (spring-loaded), 100X oil (spring-loaded)                |
| Nosepiece .....    | Quintuple, ball-bearing type  |
| Focusing.....      | Coaxial coarse and fine focusing                                      |
| Stage.....         | Built-in, low-position coaxial mechanical stage                       |
| Condenser.....     | Focusable 1.25 N.A. Abbe condenser (rack and pinion type)             |
| Diaphragm .....    | Iris diaphragm with filter holder (32mm blue filter included)         |
| Illumination ..... | Built-in Koehler illumination, halogen 12V/20W with intensity control |

| Cat. No.        | Mfr. No.      | Description  | Qty. |
|-----------------|---------------|--|------|
| <b>M8100-15</b> | 1100100500592 | Binocular - model B3-220ASC, with achromatic objectives  | 1/ea |
| <b>M8100-17</b> | 1100100500641 | Trinocular - model B3-223ASC, with achromatic objectives | 1/ea |

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## Microscopes



### Motic® BA BA210 Biological Microscope

MOTIC INSTRUMENTS - Ideal for clinics, institutes and universities, this microscope provides high-resolution optical performance with CCIS (color corrected infinity system) optics. The T-shaped base and pyramid-designed frame provide excellent stability for ergonomic operation. Stage, focusing and illumination controls can be reached while resting your hands on the table. An integral handle makes carrying easy.

This microscope features a locking eyepiece and a 6V/30W halogen lamp or LED option with intensity control for bright and even illumination.

The Abbe condenser is focusable and centerable and provides well-defined illumination for all objective magnifications. The 140 x 135mm stage incorporates a ball-bearing mechanism with a triangular steel rail that allows smooth cross-travel motion of 76 x 50mm and vernier scale readability to 0.1mm.

#### Specifications:

Head ..... Trinocular, Seidentopf-type, 30° inclined, 360° rotating  
Eyespiece ..... Corrected wide-field high eyepoint PL10X/18mm (paired)  
Objectives ..... CCIS EFN plan achromat objectives: 4X, 10X, 40X (spring-loaded), 100X oil (spring-loaded)  
Nosepiece ..... Reversed quadruple  
Focusing ..... Coaxial coarse and fine  
Condenser ..... Focusable 1.25 N.A. Abbe condenser with slot  
Diaphragm ..... Iris diaphragm  
Illumination ..... 6V/ 30W quartz halogen lamp or LED with intensity control  
Filter ..... Blue, 45mm  
Power supply ..... 100 to 240V

| Cat. No.         | Mfr. No.      | Description     | Qty. |
|------------------|---------------|-----------------|------|
| <b>M8100-130</b> | 1100100401251 | Trinocular head | 1/ea |



### Motic® Digital Stereo Microscope

MOTIC INSTRUMENTS - From educational to advanced lab and industrial applications, this digital stereo model offers a 3MP built-in digital camera for easy and quick image capture on its 1-4X zoom range.

#### Features:

- DM-143-FBGG-C—3MP digital stereo model
- Wide-field eyepieces WF10/20mm on binocular stereo head
- Built-in digital live high-resolution imaging chip
- 2048 x 1536 resolution USB 2.0
- Zoom-type objective 1-4X 1:4 ratio
- Pole-type stand with large working base
- Reversible stage plate black/white
- Frosted glass stage plate
- 12V/10W halogen incident illumination
- 12V/10W halogen transmitted illumination
- Switching power supply 100V-240V
- Motic Images Plus 2.0ML for PC and Mac
- Dust cover
- Calibration slide

| Cat. No.          | Mfr. No.      | Description                          | Qty. |
|-------------------|---------------|--------------------------------------|------|
| <b>DX53056101</b> | 1100500200191 | Digital stereo dissecting microscope | 1/ea |

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# Microscopes and Accessories

## Microscopes



### Colposcope Model 955

SEILER - With a 300mm working distance objective lens offering 3, 4, 7, 11 and 17X magnifications, the 955 colposcopes provide a variety of viewing options. Wide-field 12.5X eyepieces with diopter locks and fold-down rubber eyecups make viewing easier for eyeglass wearers. This colposcope has a swing arm that allows the user to practice in a relaxed setting. A fan-cooled, dual-port variable fiberoptic coaxial illumination feature allows a quick change from one lamp to another for an uninterrupted procedure if a lamp were to fail. A spare 15V, 150W lamp and dust cover are also included.

They have a five-step turret magnification changer, a maximum height of 54 in. and a minimum height of 32 in. Colposcope S6000-37 also includes a video package that includes a beam splitter, video adapter, high-resolution CCD color camera and a 15 in. flat panel color monitor.

| Cat. No. | Mfr. No.  | Description                            | Qty. |
|----------|-----------|--|------|
| S6000-35 | 30955-5   | Model 955 colposcope                   | 1/ea |
| S6000-37 | 30955-5-V | Model 955 colposcope with video option | 1/ea |



### SeilerScope Binocular Microscope

SEILER - This microscope features four flat-field achromat objectives, including a 4X, 10X, 40X and 100X oil objective, mechanical stage, variable halogen illumination, a reversed nosepiece and a Seidentopf design binocular head. It also has the ability to add plan achromat objectives.

| Cat. No. | Mfr. No. | Description          | Qty. |
|----------|----------|----------------------|------|
| S6000-1  | SXS820   | Binocular microscope | 1/ea |



### Westlab III Binocular Microscope

SEILER - This binocular microscope is designed for general use in clinical laboratories. It features low-position, coaxial coarse and calibrated fine focus control. It has two 10X wide-field eyepieces with four semi-plan achromat objectives including 4X, 10X, 40X and 100X oil objective, all mounted on a ball-bearing inward quadruple click stop nosepiece with an automatic 100V-240V universal power supply, 6V 20W halogen illumination and an optional live video feature. The microscope also comes with a dust cover, blue filter, immersion oil, spare bulb and instruction manual.

| Cat. No. | Mfr. No. | Description          | Qty. |
|----------|----------|----------------------|------|
| WLB814   | WLB814   | Binocular microscope | 1/ea |

# Microscopes and Accessories

## Microscopes

### G380-Series Microscopes

UNICO - These microscopes provide crisp, clear imaging on a versatile and ergonomic platform. They were designed with your viewing comfort in mind. The standard 10X high eye-point eyepieces are engineered to reduce eyestrain for users wearing glasses. Each eye tube features an independent focusing diopter adjustment to compensate for the natural vision differential between each eye. The base design adds stability to the body while allowing extra room for hand access to the oversized coarse and fine focus controls and the coaxial mechanical stage controls. The microscopes are available with monocular, binocular or dual-view heads. Binocular head features Seidentopf optical design with 52 to 75mm interpupillary distance adjustment. All rotate 360° and lock in place with a thumbscrew. All optics feature anti-glare, color-correction and antifungal coatings.

#### Specifications:

Eyepiece.....10X high-eyepoint widefield

Objectives.....4 and 10X, 40 and 100XR

Focusing.....Coaxial coarse and fine focus

Illumination .....LED light source



### H600 Series Clinical Laboratory Microscopes

UNICO - These advanced and versatile compound microscopes have a greater potential for research, education and medical applications. They have a reverse five-position nosepiece that provides the user with easier slide insertion and manipulation as well as room for an extra objective for special applications. The precision ball bearings and internal stop assure operational ease and durability. All objectives are parfocal, pare centered and color-coded. The microscopes are available with either Seidentopf binocular or trinocular heads. Each head rotates 360° and has a 30° inclination. They also have WF10X/FN 18 eyepieces.



| Cat. No.     | Mfr. No. | Description   | Qty. |
|--------------|----------|---|------|
| <b>H602</b>  | H602     | Binocular head - achromat 4/10X, 40/100X (oil)                  | 1/ea |
| <b>H604</b>  | H604     | Binocular head - Plan 4/10X, 40/100X (oil)                      | 1/ea |
| <b>H605</b>  | H605     | Binocular head - phase contrast SP4X, SPH10X, SPH40XR, SPH100XR | 1/ea |
| <b>H604T</b> | H604T    | Trinocular head - Plan 4/10X, 40/100X (oil)                     | 1/ea |

#### Accessories

|                |         |                             |      |
|----------------|---------|-----------------------------|------|
| <b>B6-8903</b> | B6-8903 | Stage micrometer slide      | 1/ea |
| <b>B6-2308</b> | B6-2308 | Din plan oil objective, 50x | 1/ea |
| <b>B6-9005</b> | B6-9005 | Fuse 250V, 1.5A             | 1/ea |
| <b>B6-8910</b> | B6-8910 | Optical cleaning kit        | 1/ea |

| Cat. No.      | Mfr. No. | Description                          | Qty. |
|---------------|----------|--------------------------------------|------|
| <b>G380</b>   | G380     | Binocular head                       | 1/ea |
| <b>G380PL</b> | G380PL   | Binocular head with PLAN objectives  | 1/ea |
| <b>G381</b>   | G381     | Monocular head                       | 1/ea |
| <b>G383PL</b> | G383PL   | Trinocular head with PLAN objectives | 1/ea |



### ZM180-Series Zoom Stereo Microscope

UNICO - This microscope is ideal for a variety of industrial, medical, educational and special OEM applications. It features a binocular body and has a comfortable 45° inclination angle. The body may be rotated 360° for group sessions. Dual-diopter adjustment of five diopters enables precise setting focus according to individuals' needs. Total magnification range extends from 2.1 to 225X. Interpupillary adjustment range from 55 to 75mm.



#### Specifications:

Eyepiece.....WF10X

Zoom range .....0.7 to 4.5X

Illumination .....Top halogen and bottom fluorescent

Objectives .....1X

| Cat. No.       | Mfr. No. | Description                     | Qty. |
|----------------|----------|---------------------------------|------|
| <b>ZM181HF</b> | ZM181HF  | Binocular head with PE-HF stand | 1/ea |
| <b>D4-2001</b> | D4-2001  | 2X auxiliary lens               | 1/ea |
| <b>D4-2004</b> | D4-2004  | 0.5X auxiliary lens             | 1/ea |

# Microscopes and Accessories

## Microscope Accessories



### Microscope Carrying Case

C & A SCIENTIFIC - Nylon case has heavy-duty carrying straps and zip-down sides. Separate inner liner provides support. Easy-fitting inside straps adjust to secure most microscope models. Dimensions (W x D x H): 12 x 8 x 18 in.

| Cat. No. | Mfr. No. | Description   | Qty. |
|----------|----------|---------------|------|
| MA98     | MA98     | Carrying case | 1/ea |



### Optical Lens Paper

C & A SCIENTIFIC - Lens paper is suitable for cleaning microscopes, cameras and other optical instruments. Size 4 x 6 in. Supplied in pad of 50 or 100 sheets.

| Cat. No. | Mfr. No. | Description | Qty.   |
|----------|----------|-------------|--------|
| MA50     | MA50     | 50 sheets   | 400/cs |
| MA02     | MA02     | 100 sheets  | 240/cs |

### MiniVID® USB 5.1MP Digital Camera

LW SCIENTIFIC - The innovative MiniVID® camera slips into any standard microscope eyepiece tube, in place of the eyepiece or fits onto any standard threaded C-mount.

#### Specifications:

Sensor resolution ..... 5.1MP  
Image sensor ..... ½ in. CMOS  
USB interface ..... Yes  
Software ..... ScopePhoto analysis software  
Mounting options ..... Standard eyetube (23mm and 30mm)  
standard threaded C-mount  
Picture format ..... JPEG/BITMAP  
Power supply ..... USB 1.5VVID USB



| Cat. No.  | Mfr. No.      | Description              | Qty. |
|-----------|---------------|--------------------------|------|
| M8000-139 | MVC-U5MP-EMTN | USB 5.1MP digital camera | 1/ea |



### Omni-VID® C-Mount Microscope Camera

LW SCIENTIFIC - The Omni-VID® features built-in live video on a bright 2 in. LCD screen and 8MP digital imaging. Connect the camera to any size TV for training large groups or connect to a PC for capturing digital images. Also connects to trinocular microscope.

#### Specifications:

Sensor resolution ..... 3.1MP  
Maximum resolution ..... 8MP  
Memory card ..... SD/MMC card  
USB interface ..... Yes  
TV output ..... NTSC/PAL  
Picture/video format ..... JPEG/MPEG4  
Power supply ..... DC 12V 1.5A

| Cat. No. | Mfr. No.      | Description                            | Qty. |
|----------|---------------|--|------|
| M8000-84 | OVC-8MP2-CMT3 | Microscope camera with built-in screen | 1/ea |



### Pro Service Kit

LW SCIENTIFIC - Keep your optical equipment operating flawlessly with this kit.

Kit includes:

- Easy-to-understand picture manual
- Lens paper - 280 sheets
- Air duster - 8 oz.
- Lens cleaning fluid - 1 oz.
- 100 cotton-tipped applicators
- Microfiber lens cloth
- Dusting brush
- Micro-glide gear lubricant
- 3 Allen wrenches
- Friction collar wrench
- Precision screwdriver set
- Nylon carrying case

| Cat. No. | Mfr. No.      | Description     | Qty. |
|----------|---------------|-----------------|------|
| M8000-41 | MSP-PSK7-7777 | Pro service kit | 1/ea |

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# Microscopes and Accessories

## Microscope Bulbs

### Microscope Replacement Bulbs

BULBTRONICS



Bulb B00964-001



Bulb B17302-001



Bulb B00262-001

| Cat. No.                  | Mfr. No.              | Power Requirements | Shape  | Bulb Life (hrs.) | Base              | Manufacturer   |
|---------------------------|-----------------------|--------------------|--------|------------------|-------------------|----------------|
| <b>Halogen bulbs</b>      |                       |                    |        |                  |                   |                |
| <b>B00859-001</b>         | 64225 #54260          | 6V, 10W            | T3     | 100              | G4, 2 pin         | OSRAM SYLVANIA |
| <b>B00861-001</b>         | 64250HLX (ESB) #54261 | 6V, 20W            | T3 1/2 | 100              | G4, 2 pin         | OSRAM SYLVANIA |
| <b>B00928-001</b>         | 64627XEFP #54189      | 12V, 100W          | MR16   | 50               | GZ6.35, 2 pin     | OSRAM SYLVANIA |
| <b>B00964-001</b>         | 6834EFP #314880       | 12V, 100W          | MR16   | 50               | GZ6.35, 2 pin     | PHILIPS        |
| <b>B00986-001</b>         | 7388 (ESB) #256784    | 6V, 20W            | T3     | 100              | G4, 2 pin         | PHILIPS        |
| <b>B01369-001</b>         | EJA #54753            | 21V, 150W          | MR16   | 40               | GX5.3, 2 pin      | OSRAM SYLVANIA |
| <b>B01401-001</b>         | EKE #315929           | 21V, 150W          | MR16   | 200              | GX5.3, 2 pin      | PHILIPS        |
| <b>Incandescent bulbs</b> |                       |                    |        |                  |                   |                |
| <b>B02837-001</b>         | 8-G102 #OP2103        | 6V, 10W            | G4 1/2 | 200              | E10, mini screw   | OLYMPUS        |
| <b>B17302-001</b>         | 0017302               | 120V, 30W          | S11    | 50               | BA15D, DC Bayonet | EIKO           |

| Cat. No.          | Mfr. No.            | Power Requirements | Overall Length (mm) | Bulb Life (hrs.) | Base             | Manufacturer   |
|-------------------|---------------------|--------------------|---------------------|------------------|------------------|----------------|
| <b>Arc lamps</b>  |                     |                    |                     |                  |                  |                |
| <b>B00256-001</b> | HBO100W/2 #69217    | 100W               | 90                  | 200              | SFA7.5-2, SFA9-2 | OSRAM SYLVANIA |
| <b>B00257-001</b> | HBO103W/2 #69182    | 100W               | 90                  | 300              | SFA7.5-2, SFA9-2 | OSRAM SYLVANIA |
| <b>B00268-001</b> | HBO50W/AC/L1 #69213 | 37V, 50W, 1.45A    | 53                  | 100              | SFA6-2           | OSRAM SYLVANIA |
| <b>B00269-001</b> | HBO50W/AC/L2 #69214 | 42V, 50W, 1.3A     | 53                  | 100              | SFA6-2           | OSRAM SYLVANIA |
| <b>B00293-001</b> | USH-102D #5000273   | 100W               | 90                  | 200              | Sleeve           | USHIO          |

### Microscope Replacement Bulbs

BULBTRONICS

| Cat. No.          | Mfr. No.                   | Power Requirements | Shape  | Bulb Life  | Base      | Manufacturer     |
|-------------------|----------------------------|--------------------|--------|------------|-----------|------------------|
| <b>Halogen</b>    |                            |                    |        |            |           |                  |
| <b>B00985-001</b> | 7387 FHC/ESA #261263       | 6V 10W             | T2 1/2 | 100 hrs.   | G4/2 pin  | PHILIPS          |
| <b>B01014-001</b> | 787 #43115                 | 6V 10W             | T2 1/4 | 100 hrs.   | G4/2 pin  | GENERAL ELECTRIC |
| <b>B01813-001</b> | FHD/ESA, JC6V-10W #1000531 | 6V 10W             | T2 3/4 | 100 hrs.   | G4/2 pin  | USHIO            |
| <b>B00124-001</b> | 6605 #25684-2              | 6V 10W             | T3     | 2,000 hrs. | G4/2 pin  | PHILIPS          |
| <b>B00584-001</b> | 13528 #315044              | 6V 15W             | MR16   | 500 hrs.   | GZ4/2 pin | PHILIPS          |

# Microscopes and Accessories

## Microscope Bulbs

### Microscope Replacement Bulbs (continued)

BULBTRONICS

|   | Cat. No.          | Mfr. No.                           | Power Requirements | Shape | Bulb Life  | Base         | Manufacturer     |
|---|-------------------|------------------------------------|--------------------|-------|------------|--------------|------------------|
| <b>Halogen</b>  |                   |                                    |                    |       |            |              |                  |
|    | <b>B00966-001</b> | 688 (NARVA 55133)<br>#S688         | 6V 20W             | T3    | 100 hrs.   | PY16-1.25    | NARVA            |
|    | <b>B01507-001</b> | ESB #1000532<br>(FHE/ESB JC6V-20W) | 6V 20W             | T2 ¾  | 100 hrs.   | G4/2 pin     | USHIO            |
|    | <b>B01508-001</b> | ESB/FHE #10330                     | 6V 20W             | T3    | 100 hrs.   | G4/2 pin     | EIKO             |
|    | <b>B00551-001</b> | 13078 AXIAL<br>#232645             | 12V 20W            | T3    | 2,000 hrs. | G4/2 pin     | PHILIPS          |
|    | <b>B00634-001</b> | 20T3Q/CL/RP<br>12V #58655          | 12V 20W            | T3    | 2,000 hrs. | G4/2 pin     | OSRAM SYLVANIA   |
|   | <b>B00880-001</b> | 64425 (20T3Q/CL<br>21V #58661)     | 12V 20W            | T3    | 2,000 hrs. | G4/2 pin     | OSRAM SYLVANIA   |
|  | <b>B02112-001</b> | JC 12V20WG4<br>#JC5017             | 12V 20W            | T2 ½  | 2,000 hrs. | G4/2 pin     | HIGUCHI          |
|  | <b>B02115-001</b> | JC12V20W/G4<br>#1000821 30MM       | 12V 20W            | T2 ¾  | 2,000 hrs. | G4/2 pin     | USHIO            |
|  | <b>B02362-001</b> | Q20T2.5/12V/CL<br>12V #34715       | 12V 20W            | T3    | 2,000 hrs. | G4/2 pin     | GENERAL ELECTRIC |
|  | <b>B00916-001</b> | BRL 64610 HLX<br>#54219            | 12V 50W            | T3    | 50 hrs.    | G6.35/2 pin  | OSRAM SYLVANIA   |
|  | <b>B01121-001</b> | BRL, JC12V-50W<br>#1000071         | 12V 50W            | T3 ½  | 50 hrs.    | G6.35/2 pin  | USHIO            |
|  | <b>B00924-001</b> | EVA 64623 HLX<br>#54251            | 12V 100W           | T4    | 2,000 hrs. | GY6.35/2 pin | OSRAM SYLVANIA   |
|  | <b>B00926-001</b> | FCR 64625 HLX<br>#54248            | 12V 100W           | T3 ½  | 50 hrs.    | GY6.35/2 pin | OSRAM SYLVANIA   |
|  | <b>B00981-001</b> | FCR #261016                        | 12V 100W           | T3 ½  | 50 hrs.    | GY6.35/2 pin | PHILIPS          |
|  | <b>B01740-001</b> | FCR, JC12V-100W<br>#1000490        | 12V 100W           | T3 ½  | 50 hrs.    | GY6.35/2 pin | USHIO            |

# Microscopes and Accessories

## Microscope Bulbs

### Microscope Replacement Bulbs (continued)

BULBTRONICS

|   | Cat. No.          | Mfr. No.                   | Power Requirements | Shape  | Bulb Life | Base        | Manufacturer     |
|---|-------------------|----------------------------|--------------------|--------|-----------|-------------|------------------|
| <b>Halogen</b>  |                   |                            |                    |        |           |             |                  |
|    | <b>B01367-001</b> | EJA #10264                 | 21V 150W           | MR16   | 40 hrs.   | GX5.3/2 pin | EIKO             |
|    | <b>B01368-001</b> | EJA #441428                | 21V 150W           | MR16   | 40 hrs.   | GX5.3/2 pin | PHILIPS          |
|    | <b>B01371-001</b> | EJA, JCR21V-150W #1000297  | 21V 150W           | MR16   | 40 hrs.   | GX5.3/2 pin | USHIO            |
|  | <b>B01402-001</b> | EKE #54842                 | 21V 150W           | MR16   | 200 hrs.  | GX5.3/2 pin | OSRAM SYLVANIA   |
|  | <b>B01403-001</b> | EKE JCR21V-150W #1000306   | 21V 150W           | MR16   | 200 hrs.  | GX5.3/2 pin | USHIO            |
|  | <b>B00935-001</b> | FCS 64640 HLX #54263       | 24V 150W           | T4     | 50 hrs.   | G6.35/2 pin | OSRAM SYLVANIA   |
|  | <b>B01742-001</b> | FCS, JC24V-150WUI #1000492 | 24V 150W           | T4 1/4 | 50 hrs.   | G6.35/2 pin | USHIO            |
|  | <b>B01743-001</b> | FCS #13598                 | 24V 150W           | T4     | 50 hrs.   | G6.35/2 pin | GENERAL ELECTRIC |
|  | <b>B00940-001</b> | EJH 64655 HLX #54254       | 24V 250W           | T4     | 50 hrs.   | G6.35/2 pin | OSRAM SYLVANIA   |

# Microscopes and Accessories

## Microscope Bulbs

### Microscope Replacement Bulbs (continued)

BULBTRONICS

| Cat. No.  | Mfr. No.          | Power Requirements    | Shape         | Bulb Life | Base     | Manufacturer                         |
|---|-------------------|-----------------------|---------------|-----------|----------|--------------------------------------|
| <b>Incandescent</b>   |                   |                       |               |           |          |                                      |
|    | <b>B02793-001</b> | 77Z #843121           | 6V 15W        | T6        | 100 hrs. | P250D-4 Flange DR FISCHER            |
|    | <b>B02858-001</b> | 8018 #76314           | 6V 15W        | T6        | 100 hrs. | BA15D/DC Bayonet OSRAM SYLVANIA      |
|    | <b>B16357-001</b> | 8018 #8000269         | 6V 15W        | T6        | 200 hrs. | BA15D/DC BAYONET USHIO               |
|    | <b>B12775-001</b> | 70313 (390158) #76305 | 6V 30W        | T11       | 200 hrs. | P47D/Prefocus Flange OSRAM SYLVANIA  |
|   | <b>B12164-001</b> | 8G101                 | 6V 5W         | G4 ½      | 200 hrs. | E10/Mini Screw OLYMPUS               |
|  | <b>B02747-001</b> | 1460                  | 6.5V 17.8W    | S8        | 100 hrs. | P30D/DC Prefocus BULBTRONICS GENERIC |
|  | <b>B04091-001</b> | 1460X                 | 6.5V 17.8W    | S8        | 100 hrs. | P30D/DC Prefocus BULBTRONICS GENERIC |
|  | <b>B02809-001</b> | 1630 #27488           | 6.5V 2.75A    | S8        | 100 hrs. | P30D/DC Prefocus GENERAL ELECTRIC    |
|  | <b>B02835-001</b> | 78595                 | 115V/125V 20W | T8        | 200 hrs. | BA15D/DC Bayonet NIKON               |

# Microscopes and Accessories

## Microscope Bulbs

### Microscope Replacement Bulbs (continued)

BULBTRONICS

| Cat. No.  | Mfr. No.          | Power Requirements       | Shape    | Bulb Life | Base       | Manufacturer              |                     |
|---|-------------------|--------------------------|----------|-----------|------------|---------------------------|---------------------|
| <b>Incandescent</b>   |                   |                          |          |           |            |                           |                     |
|    | <b>B04796-001</b> | 6S6 DC 120V              | 120V 6W  | S6        | 3,500 hrs. | BA15D/DC Bayonet          | BULBTRONICS GENERIC |
|    | <b>B02808-001</b> | 15S11/102<br>120V #13291 | 120V 15W | S11       | 400 hrs.   | E26, E27/<br>Medium screw | GENERAL ELECTRIC    |
|    | <b>B02927-001</b> | 25S11/5C120 130V         | 120V 25W | S11       | 500 hrs.   | E12/<br>Candelabra        | EIKO                |
|   | <b>B02834-001</b> | 78508                    | 120V 30W | S11       | 200 hrs.   | BA15D/DC<br>Bayonet       | NIKON               |
|  | <b>B02922-001</b> | BLC #1000060             | 120V 30W | S11       | 50 hrs.    | BA15D/DC<br>Bayonet       | USHIO               |
|  | <b>B17302-001</b> | BLC #10020               | 120V 30W | S11       | 50 hrs.    | B15D/DC<br>Bayonet        | EIKO                |
|  | <b>B17358-001</b> | EI722 #41079             | 120V 30W | G9 ½      | 500 hrs.   | BA15D/DC<br>Bayonet       | EIKO                |



## Thermo Scientific Dry Block Heaters

THERMO SCIENTIFIC - These analog and digital dry baths offer precise temperature control resolution and a much smaller footprint than a general purpose incubator and can be used at temperatures up to 130°C.

They feature a built-in temperature-sensing probe for improved temperature accuracy and control. Compact design saves bench space. The anodized aluminum modular blocks accommodate test tubes, square cuvettes, microcentrifuge tubes, 96-well plates, PCR plates and conical bottom centrifuge tubes. Dry block heaters hold 1, 2, 3, 4, and 6 interchangeable modular blocks to accommodate a variety of vessels.

Digital units utilize a PID microprocessor controller with digital temperature set and easy-to-read LED display for accurate and reproducible temperature control. Analog units feature bimetallic dual thermostat control. Powder-coated steel body construction and chemically resistant design ensures durability.

Modular block mounts on a single temperature probe in dry block heater bottom, for optimum temperature accuracy and control. Dual temperature control for precise control over two ranges: low range slightly above ambient to 60°C; high range 50°C to 130°C.

### Specifications:

#### Analog models

Temperature control ..... ±3.5°C at 37°C

Temperature uniformity ..... ±0.5°C at 37°C

#### Digital models

Temperature control ..... ±0.5°C at 37°C

Temperature uniformity ..... ±0.4°C at 37°C

| Cat. No.        | Mfr. No. | Description                                | Qty. |
|-----------------|----------|--|------|
| <b>H2025-1B</b> | 2050Q    | Analog - 7.6 x 6.2 x 3.4 in. - 1 block     | 1/ea |
| <b>H2025-7A</b> | 2052Q    | Analog - 0.6 x 8.4 x 3.4 in. - 2 blocks    | 1/ea |
| <b>H2025-5B</b> | 2053Q    | Analog - 9.1 x 11.25 x 3.4 in. - 3 blocks  | 1/ea |
| <b>H2025-6A</b> | 2054Q    | Analog - 12.4 x 8.3 x 3.4 in. - 4 blocks   | 1/ea |
| <b>H20258A</b>  | 2056Q    | Analog - 12.9 x 11.25 x 3.4 in. - 6 blocks | 1/ea |
| <b>H2030-1A</b> | 2000Q    | Digital - 11.2 x 8.7 x 3.6 in. - 1 block   | 1/ea |
| <b>H2030-2A</b> | 2001Q    | Digital - 14.2 x 8.7 x 3.6 in. - 2 blocks  | 1/ea |
| <b>H2030-3A</b> | 2002Q    | Digital - 12 x 10.8 x 3.6 in. - 3 blocks   | 1/ea |
| <b>H2030-4A</b> | 2003Q    | Digital - 14.1 x 10.8 x 3.6 in. - 4 blocks | 1/ea |

## Thermo Scientific Lab-Line™ Aluminum Module Blocks

THERMO SCIENTIFIC - Interchangeable units are for use with heaters H2025- and H2030-series. Blocks are black anodized aluminum for maximum heat transfer. Pliable tapes fit tightly around any apparatus for optimum heat transfer. Dimensions (W x L x H): 3 3/4 x 2 1/16 x 2 in.

| Cat. No.        | Mfr. No. | Description                                 | Qty. |
|-----------------|----------|---|------|
| <b>H2027-2A</b> | 2071     | 24 tubes - 10mm                             | 1/ea |
| <b>H2027-3A</b> | 2072     | 22 tubes - 12 and 13mm                      | 1/ea |
| <b>H2027-4A</b> | 2073     | 12 tubes - 15 and 16mm                      | 1/ea |
| <b>H2027-5A</b> | 2074     | 8 tubes - 20mm                              | 1/ea |
| <b>H2025-9A</b> | 2069     | 20 tubes - 10mm – for microcentrifuge tubes | 1/ea |

## Thermo Scientific Modular Heat Dri-Bath

THERMO SCIENTIFIC

| Cat. No.       | Mfr. No. | Description           | Qty. |
|----------------|----------|-----------------------|------|
| <b>H2105-1</b> | DB16525  | Modular heat dri-bath | 1/ea |



## Thermo Scientific Modular Heating Blocks

THERMO SCIENTIFIC - These aluminum alloy blocks are for use with Dri-Bath Incubators H2104-1, H2104-2 and H2105-3. All blocks include thermometer well for easy measuring of block temperature. Wells are 48mm deep. Dimensions (D x W x H): 4 x 3 x 2 in.

| Cat. No.        | Mfr. No.   | Description                                | Qty. |
|-----------------|------------|--|------|
| <b>H2105-25</b> | BK165X9A   | 6 wells - 25.75mm                          | 1/ea |
| <b>H2105-15</b> | BK165X6AQ  | 12 wells - 15.75mm                         | 1/ea |
| <b>H2105-16</b> | BK165X7AQ  | 12 wells - 16.75mm                         | 1/ea |
| <b>H2105-20</b> | BK165X8AQ  | 12 wells - 20.75mm                         | 1/ea |
| <b>H2105-10</b> | BK165X4A   | 20 wells - 10.75mm                         | 1/ea |
| <b>H2105-13</b> | BK165X5AQ  | 20 wells - 13.75mm                         | 1/ea |
| <b>H2105-33</b> | BK165X17AQ | 20 wells - with microcentrifuge tube wells | 1/ea |

# Molecular Diagnostics

## Analog Dry Bath Incubators

BOEKEL - These incubators are ideal for a variety of applications, including restriction digests, COD denaturing DNA, BUN, melting agar, coagulation studies, in situ hybridization and hot start PCR. They feature amber pilot lights and come with spirit-filled thermometers. Incubators are designed to accommodate an assortment of interchangeable heating block modules. Available in 1-, 2- or 4-block capacity.



| Cat. No.  | Mfr. No. | Description   | Qty. |
|---|----------|---|------|
| <b>1-block capacity - 8 x 9.8 x 3.5 in. (W x D x H)</b> |          |   |      |
| <b>BO112001</b>   | 112001   | 150°C maximum temperature - 115VAC, 50/60 Hz, 90W power req.  | 1/cs |
| <b>2-block capacity - 8 x 9.8 x 3.5 in. (W x D x H)</b> |          |   |      |
| <b>BO112002</b>   | 112002   | 130°C maximum temperature - 115VAC, 50/60 Hz, 180W power req. | 1/cs |
| <b>4-block capacity - 8 x 13 x 3.5 in. (W x D x H)</b>  |          |   |      |
| <b>BO112004</b>   | 112004   | 130°C maximum temperature - 115VAC, 50/60 Hz, 360W power req. | 1/cs |



## Digital Dry Bath Incubators

BOEKEL - These incubators are ideal for a variety of applications including restriction digests, COD denaturing DNA, BUN, melting agar, coagulation studies, in situ hybridization and hot start PCR. They incorporate a proportional integrative derivative (PID) controller for easy temperature selection, rapid heat-up and superb stability. Temperature can be set in 0.1° increments up to 120°C. Temperature uniformity is 0.25°C at 37°C. The incubators have a large LED display that can be seen easily throughout the lab. They are supplied with a block extractor rod and are designed to accommodate an assortment of interchangeable heating block modules. Available in 2- and 4-block-capacity models. Temperature range: ambient +5°C to 120°C.

| Cat. No.  | Mfr. No. | Description                       | Qty. |
|---|----------|-----------------------------------|------|
| <b>2-block capacity - 8 x 9.8 x 3.5 in. (W x D x H)</b>     |          |                                   |      |
| <b>BO113002</b>   | 113002   | 115VAC, 50/60 Hz, 200W power req. | 1/cs |
| <b>4-block capacity - 10.2 x 11.3 x 3.5 in. (W x D x H)</b> |          |                                   |      |
| <b>BO113004</b>   | 113004   | 115VAC, 50/60 Hz, 380W power req. | 1/cs |



## Block Modules for Dry Bath Incubators

BOEKEL - These precision-machined, solid aluminum blocks fit both digital and analog baths. They have a well for a thermometer and also have a block extractor hole. Test tube block modules resist corrosion and feature alpha-/numerical-labeled rows and columns for easy vessel identification. Applications for the microplate block modules include incubation for EIAs, ELISAs and monoclonal screening. One block module per case.

| Cat. No.        | Mfr. No. | Description               | Qty. |
|-----------------|----------|---------------------------|------|
| <b>BO110016</b> | 110016   | For 12 x 16mm test tubes  | 1/cs |
| <b>BO110010</b> | 110010   | For 20 x 10mm test tubes  | 1/cs |
| <b>BO110013</b> | 110013   | For 20 x 13mm test tubes  | 1/cs |
| <b>BO110040</b> | 110040   | For 24 x 1.5mL microtubes | 1/cs |

## Eppendorf® IsoTherm Iceless Cold Storage System

EPPENDORF - The IsoTherm-System® specializes in cooling samples effectively and constantly at -21°C or 0°C over many hours. It consists of the following components: the IsoRack (work rack), IsoPack (cool pack) and IsoSafe (insulating box). The IsoTherm System can be used as an enzyme bar to prevent enzymes from becoming inactive as well as for PCR sample preparation, sample transport and slow thawing of frozen samples. Holds 24 reaction tubes (0.5/2.0mL).



Choose the complete system or combination set with IsoPack cool pack and IsoRack rack. The white cool pack will maintain 0°C for up to 6 hrs., while the blue pack will maintain -21°C for up to 3 hrs. Racks can be centrifuged and are stackable, autoclavable and floatable.

| Cat. No.                                       | Mfr. No.  | Description   | Qty. |
|--|-----------|---|------|
| <b>C3513-2</b>                                 | 022510053 | System starter set includes IsoSafe, IsoRack, 0°C IsoPack and -21°C IsoPack for 1.5/2.0mL tubes | 1/ea |
| <b>IsoPack and IsoRack set includes 1 each</b> |           |   |      |
| <b>C3513-8</b>                                 | 022510282 | For 0.5mL tubes, 0°C  | 1/ea |
| <b>C3513-6</b>                                 | 022510240 | For 1.5/2.0mL tubes, 0°C  | 1/ea |

## Eppendorf Mastercycler® pro Thermal Cyclers

EPPENDORF – With fast speeds, high precision and reliability, the Mastercycler® pro easily fulfills these requirements:

- Stop evaporation effectively and keep the concentration of your mastermix with the patented *vapo.protect®* technology. This technology leads to improved reproducibility and specificity at the rim and corners of the block.
- The extremely high heating and cooling rates of the Mastercycler® pro S gives you the speed you need. Unsurpassed speed can be achieved with Eppendorf's Impulse PCR, a device driven hot-start function that increases heating rates to 8°C/s.
- SteadySlope® technology helps ensure that the heating and cooling ramp rates are identical in both gradient and normal operation.
- Eppendorf's Mastercycler® pro offers ultimate flexibility. Choose any plate, tube or strip you want and expand into a mini satellite system.



| Cat. No.         | Mfr. No.  | Description                                       | Qty. |
|------------------|-----------|---|------|
| <b>950030015</b> | 950040015 | Eppendorf Mastercycler® pro and control panel     | 1/bx |
| <b>950040025</b> | 950040025 | Eppendorf Mastercycler® pro S and control panel   | 1/bx |
| <b>950040035</b> | 950040035 | Eppendorf Mastercycler® pro 384 and control panel | 1/bx |

## Eppendorf Thermomixer® Dry Block Heating Shaker

EPPENDORF – Small and perfectly designed, Thermomixer® is an excellent compact unit for 24 x 1.5mL microcentrifuge tubes. Its impressive features include an extremely small footprint, a straightforward design and high stability—even at maximum mixing frequency.



### Product features:

- Dedicated for 24 x 1.5mL microcentrifuge tubes
- Dry incubation technology eliminates contamination risk associated with classical waterbath incubation
- Insulated thermoblock for ergonomic operation—designed to help prevent burns
- Optimized borehole design for maximum temperature accuracy
- Whisper-quiet operation to benefit the work environment
- Small footprint to fit on crowded lab benches
- Digital display for reproducible parameter selection
- ShortMix function
- 2-year warranty

### Specifications:

|                                 |   |
|---------------------------------|---|
| Temperature settings .....      | From 1°C to 99°C  |
| Temperature control range ..... | From approx. 4°C above RT to 99°C                           |
| Incubating accuracy .....       | ± 1°C between 20°C and 45°C ± 2°C below 20°C and above 45°C |
| Mixing frequency .....          | 300–1,400 rpm   |
| Mixing orbit .....              | 3mm   |
| Dimensions (W x D x H) .....    | 6.5 x 9.4 x 5.7 in.   |

| Cat. No.        | Mfr. No.  | Description  | Qty  |
|-----------------|-----------|--|------|
| <b>S8101-50</b> | 022670000 | Thermomixer® with thermoblock for 1.5mL test tubes, work rack and 0°C cool pack - 120V, 50-60 Hz | 1/ea |

## Exchangeable Thermoblocks for use with Eppendorf Thermomixer® R and ThermoStat Plus

EPPENDORF – Interchangeable thermoblocks help ensure effective heat transfer and the flexibility to adapt to your particular application.

### Product features:

- All blocks are heat-insulated for ergonomic operation—designed to help prevent burns
- Optimized borehole design for precise fitting of the test tubes promotes maximum temperature accuracy



| Cat. No.        | Mfr. No.  | Description                               | Qty. |
|-----------------|-----------|---|------|
| <b>S8101-54</b> | 022670506 | 24 x 0.5mL with IsoRack and 0°C cool pack | 1/ea |
| <b>S8101-55</b> | 022670522 | 24 x 1.5mL with IsoRack and 0°C cool pack | 1/ea |
| <b>S8101-56</b> | 022670549 | 24 x 2.0mL with IsoRack and 0°C cool pack | 1/ea |

| Cat. No.         | Mfr. No.  | Description  | Qty. |
|------------------|-----------|--|------|
| <b>22670581</b>  | 022670581 | 24 x 5mL (12mm O.D.)   | 1/ea |
| <b>C3515-473</b> | 022670557 | 24 x cryo tubes (12.5mm O.D.)                                      | 1/ea |
| <b>C3515-471</b> | 022670514 | 4 x 50mL conical   | 1/ea |
| <b>22670573</b>  | 022670573 | Adapter 96-well PCR plate for MTP/DWP thermoblock                  | 1/ea |
| <b>C3515-472</b> | 022670590 | 4 x glass slides hybridization chamber, with humidity control pads | 1/ea |

To order, call: 800.964.5227

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# Molecular Diagnostics



## Eppendorf Thermomixer® R Dry Block Heating and Cooling Shaker

**EPPENDORF** - The Thermomixer® R conveniently offers simultaneous mixing and temperature control. It meets the highest demands for ease-of-use and flexibility: its counter-cooling ability provides efficient cooling, thereby greatly expanding both its temperature control functions and range of applications.

Ten different thermoblocks are available, all of which can be simply and quickly exchanged, to adapt the unit to daily and/or changing requirements in the laboratory. Two freely selectable program sequences with incubating, mixing and rest phases, as well as subsequent cooling to 13°C below room temperature, make everyday lab routines much easier.

### Product features:

- Wide temperature range and high temperature accuracy due to active heating and cooling capability
- Dry incubation technology helps eliminate contamination risk associated with classical waterbath incubation
- Ten different exchangeable thermoblocks offer a high degree of flexibility
- Whisper-quiet operation to benefit the work environment
- Small footprint to fit on crowded lab benches
- 2-year warranty
- ShortMix, interval mixing and pause function
- RS-232 interface for remote control

### Specifications:

|                                  |  |
|----------------------------------|--|
| Temperature settings .....       | From 1°C to 99°C   |
| Temperature control range .....  | From 13°C below RT to 99°C*                                    |
| Incubating accuracy .....        | ±0.5°C between 20°C and 45°C<br>±2°C below 20°C and above 45°C |
| Timer .....                      | 1 minute to 99:59 hours, continuous                            |
| Mixing speed .....               | 300–1,500 rpm*   |
| Mixing orbit .....               | 3mm  |
| Dimensions, without block: ..... | 8.7 x 9.8 x 4.9 in. (W x D x H)                                |

\*Upper limit depends on thermoblock chosen

| Cat. No. | Mfr. No.  | Description   | Qty  |
|----------|-----------|---|------|
| S8101-52 | 022670107 | Thermomixer® R, without thermoblock, 120V, 50-60 Hz | 1/ea |



## Eppendorf Vacufuge® plus Vacuum Concentrator

**EPPENDORF** - Designed to quickly and efficiently concentrate DNA/RNA, nucleotides, proteins and other samples, this system offers a choice of three operation modes (aqueous, alcohol or high vapor pressure) to correspond with sample solvent. Automatic vacuum aeration helps prevent condensation buildup, maximize evaporation efficiency and prolong pump life. Choose from four heating levels for efficient concentration of a variety of samples: 30°C, 45°C, 60°C and ambient.

The unit is narrow to save bench space. Its motorless drive and sealed chamber require little maintenance. Operation is very quiet, even with the pump on. It is available as a complete system with built-in diaphragm pump.

| Cat. No.      | Mfr. No.  | Description   | Qty. |
|---------------|-----------|---|------|
| C3514-3       | 022820109 | Complete system with built-in diaphragm pump, includes 48 x 1.5/2.0mL fixed-angle rotor - 120V, 60 Hz | 1/ea |
| <b>Rotors</b> |           |   |      |
| C3514-1       | 022822080 | 72 x 0.5mL Eppendorf tubes  | 1/ea |
| C3514-5       | 022822004 | 48 x 1.5/2mL Eppendorf tubes  | 1/ea |
| C3514-8       | 022822101 | Stacking spacer for 0.5 and 1.5/2mL tube rotors   | 1/ea |
| 22822228      | 022822228 | 6 x 15/50mL conical tubes   | 1/ea |
| C3514-424     | 022822241 | 2x MTP/PCR plates   | 1/ea |
| C3514-10      | 022822144 | 24 x 5/7mL tubes (12 x 67-100mm)  | 1/ea |
| C3514-38      | 022822233 | 8 x 15mL tubes (18 x 105-120mm)   | 1/ea |
| C3514-37      | 022822179 | 8 x 16mL tubes (18 x 105-128mm)   | 1/ea |
| C3514-9       | 022822128 | 36 x 2/4mL tubes (15 x 45-48mm)   | 1/ea |
| C3514-36      | 022822136 | 16 x 10mL tubes (20 x 42-45mm)  | 1/ea |
| C3514-35      | 022822217 | 12 x 20mL tubes (31 x 55mm)   | 1/ea |

## Thermal Printer DPU 414

**EPPENDORF** - Serial printer includes power supply 120 V/60 Hz unit and printer cable.

| Cat. No.  | Mfr. No.  | Description             | Qty. |
|-----------|-----------|-------------------------|------|
| C3514-132 | 952010158 | Thermal printer DPU 414 | 1/ea |



### Aluminum Insert Blocks for Dri-Block® DB-2 and DB-3 Series Heaters

TECHNE - These heating blocks are for insertion in all Dri-Block® heaters. All blocks are interchangeable.

| Cat. No.       | Mfr. No. | Description               | Qty. |
|----------------|----------|---------------------------|------|
| <b>H2097-3</b> | 6013503  | 10mm tube block, 20 tubes | 1/ea |
| <b>H2097-5</b> | 6013505  | 13mm tube block, 20 tubes | 1/ea |
| <b>H2097-7</b> | 6013505  | 16mm tube block, 12 tubes | 1/ea |



### Dri-Block® Heaters

TECHNE - Dri-Block® compact heaters provide rapid heatup and reliable heat control. They are ideal for warming test tubes, cuvettes, microcentrifuge tubes, 96-well plates and other small containers for incubation, boiling, inactivation, wet ashing, enzyme analysis and a variety of clinical and industrial applications. Choose analog or digital units.

Removable aluminum alloy insert blocks, available separately, accept test tubes with diameters from 6 to 26mm, 0.5 or 1.5mL microcentrifuge tubes and a specially designed block to fit Techne® Hi-Temp 96° polycarbonate microplates. A close fit of tubes in blocks helps ensure high heat transference. The heater design, temperature sensor and solid-state circuitry deliver exceptional temperature control uniformity. Lightweight but durable, these heaters have sufficient insulation to help ensure that the case remains cool enough to handle even at maximum operating temperatures. All models have maximum temperature variation between identical blocks of 0.2°C at 40°C. Heater H2095-7 features red LED temperature display. CSA approved.

| Cat. No.         | Mfr. No. | Description                               | Qty. |
|------------------|----------|---|------|
| <b>H2095-30A</b> | 1081400  | Analog heater, temp. range: +5°C to 100°C | 1/ea |
| <b>H2095-3A</b>  | 1081800  | Analog heater, temp. range: +5°C to 200°C | 1/ea |
| <b>H2095-7</b>   | 1081900  | Digital heater, temp range: +5°C to 200°C | 1/ea |



### Talboys Analog Dry Block Heaters

TROEMNER - These high-wattage, constant-temperature block heaters are economical, versatile and compact. They are ideal for many laboratory procedures, including incubation and activation of cultures, enzyme reactions, immunoassays and melting/boiling points. Each unit requires minimum bench space and features convenient front-mounted temperature adjustment knobs.

Each model accepts separate interchangeable modular blocks that accommodate various sample enclosures such as vials, microplates, PCR strips and a wide variety of tubes. Each block contains a thermometer well and features close tube-and-block contact for maximum heat retention.

All units offer two separate temperature adjustment knobs, providing reproducible low- and high-temperature control. Low-range knob adjusts from ambient to 100°C and high-range knob adjusts from 75°C to 150°C.

#### Specifications:

Stability at 37°C ..... ±1.5°C

Uniformity within the block at 37°C ..... ±0.1°C

#### Temperature range

Low range ..... Ambient +5°C to 100°C

High range ..... 75°C to 150°C

| Cat. No.         | Mfr. No. | Description                                  | Qty. |
|------------------|----------|--|------|
| <b>TR-949050</b> | 949510   | 12.4 x 8 x 3.5 in. heater - 1 block capacity | 1/ea |
| <b>TR-949051</b> | 949512   | 15.4 x 8 x 3.5 in. heater - 2 block capacity | 1/ea |

### Talboys Combination Modular Heating Block

TROEMNER - This block accommodates samples in tubes of various sizes. It can hold six 6mm tubes, five 12 to 13mm tubes or three 25mm tubes. Single block size.

Dimensions (L x W x H): 3.75 x 3 x 2 in.



| Cat. No.         | Mfr. No. | Description               | Qty. |
|------------------|----------|---------------------------|------|
| <b>TR-949107</b> | 949107   | Combination heating block | 1/ea |

# Molecular Diagnostics

## Talboys Digital Dry Block Heaters

TROEMNER - These economical, versatile and compact block heaters are designed for applications that require repeatable results and superior temperature stability. The multipurpose units are ideal for incubation and activation of cultures, enzyme reactions, immunoassays, melting/boiling points and a wide variety of other laboratory procedures. Easy-to-use, front-mounted controls with independent LED displays show actual and set point temperatures. Microprocessor control offers a stability of  $\pm 0.1^\circ\text{C}$  and a uniformity within the block of  $\pm 0.1^\circ\text{C}$  at  $37^\circ\text{C}$ , while independent controls allow users to adjust temperature settings in  $0.1^\circ\text{C}$  increments. Temperature uniformity across multiple blocks is  $\pm 0.3^\circ\text{C}$ . The timer displays elapsed time or can be programmed to count down to zero and shut off unit. Audible alarm will sound when timer reaches zero. All dry block heaters include a built-in support rod holder for mounting the probe kit.



### Specifications:

Temperature range ..... Ambient +5°C to 120°C

Stability at  $37^\circ\text{C}$  .....  $\pm 0.1^\circ\text{C}$

Uniformity within the block at  $37^\circ\text{C}$  .....  $\pm 0.1^\circ\text{C}$

| Cat. No.         | Mfr. No. | Description  | Qty. |
|------------------|----------|--|------|
| <b>TR-949060</b> | 949500   | 12.4 x 8 x 3.5 in. digital heater - 1 block capacity | 1/ea |
| <b>TR-949061</b> | 949502   | 15.4 x 8 x 3.5 in. digital heater - 2 block capacity | 1/ea |



## Talboys Modular Heating Block for Individual PCR Tubes

TROEMNER - This block is constructed from solid anodized aluminum. The close contact of tubes to block walls allows for maximum heat retention. Tapered tube wells accept 0.2mL tubes and are spaced for easy access and removal. Single block dimensions: 3.75 x 3 x 2 in.

| Cat. No.         | Mfr. No. | Description             | Qty. |
|------------------|----------|-------------------------|------|
| <b>TR-949129</b> | 949129   | Heating block - 64-well | 1/ea |

## Talboys Modular Heating Block for Vials

TROEMNER - Designed for sample/serum and scintillation vials, this unit is constructed from a solid anodized aluminum block. The close contact of tubes to block walls allows for maximum heat retention. Single block size. Dimensions: 3.75 x 3 x 2 in.



| Cat. No.         | Mfr. No. | Description               | Qty. |
|------------------|----------|---------------------------|------|
| <b>TR-949144</b> | 949144   | 12 wells - 17mm vial size | 1/ea |



## Talboys Modular Heating Blocks for Tubes

TROEMNER - These modular heating blocks are constructed of solid anodized aluminum. The close contact of block walls to tubes allows for maximum heat retention. Choose from blocks designed for standard-size test tubes or for conical-bottom centrifuge tubes. Single block size. Dimensions (L x W x H): 3.75 x 3 x 2 in.

| Cat. No.                                   | Mfr. No. | Description                      | Qty. |
|--|----------|----------------------------------|------|
| <b>For test tubes</b>                      |          |                                  |      |
| <b>TR-949105</b>                           | 949105   | 8 wells - 20mm tubes             | 1/ea |
| <b>TR-949104</b>                           | 949104   | 12 wells - 15 to 16mm tubes      | 1/ea |
| <b>TR-949116</b>                           | 949116   | 16 wells - 12 to 13mm tubes      | 1/ea |
| <b>TR-949103</b>                           | 949103   | 20 wells - 12 to 13mm tubes      | 1/ea |
| <b>TR-949102</b>                           | 949102   | 24 wells - 10mm tubes            | 1/ea |
| <b>For microcentrifuge tubes</b>           |          |                                  |      |
| <b>TR-949110</b>                           | 949110   | 20 wells - 1.5mL tubes           | 1/ea |
| <b>TR-949113</b>                           | 949113   | 20 wells - 1.5mL Eppendorf tubes | 1/ea |
| <b>TR-949151</b>                           | 949151   | 20 wells - 2mL Eppendorf tubes   | 1/ea |
| <b>For conical-bottom centrifuge tubes</b> |          |                                  |      |
| <b>TR-949131</b>                           | 949131   | 12 wells - 15mL tubes            | 1/ea |

## Talboys Solid Modular Heating Block

TROEMNER - This modular heating block is constructed from solid anodized aluminum. Ideal for use as a low-temperature hot plate or for drilling a customized block.



| Cat. No.         | Mfr. No. | Description                            | Qty. |
|------------------|----------|--|------|
| <b>TR-949111</b> | 949111   | Solid heating block - 3.75 x 3 x 2 in. | 1/ea |



### Advanced® Model 2020 Multisample Osmometer

**ADVANCED INSTRUMENTS** - The Advanced® 2020 multisample osmometer is designed to process up to 20 samples with unattended operation while providing fast, accurate results. It combines proven freezing point technology with a functional design that is both simple to operate and easy to maintain. The Model 2020 is ideally suited for mid- to high-volume laboratories that prefer to automate osmolality batch testing while improving laboratory efficiency and throughput.

#### Specifications:

|                             |   |
|-----------------------------|---|
| Sample size .....           | 20 $\mu$ L  |
| Typical testing time .....  | 90 seconds  |
| Sample throughput .....     | 35 to 40 samples per hour   |
| Sample capacity .....       | Up to 20 samples  |
| Resolution .....            | 1 mOsm/kg H <sub>2</sub> O  |
| Range .....                 | 0 to 2,000 mOsm/kg H <sub>2</sub> O   |
| Linearity .....             | Less than $\pm$ 1% from a straight line over calibrated range   |
| Repeatability .....         | $\pm$ 3 mOsm/kg H <sub>2</sub> O (1 SD) between 0 and 400 mOsm/kg H <sub>2</sub> O; $\pm$ 0.75% (1 SD) between 400 and 2,000 mOsm/kg H <sub>2</sub> O |
| Dimensions (H x W x D)..... | 11.4 x 16 x 12.2 in.  |
| Power requirements .....    | 100 to 240VAC, 50/60 Hz   |

| Cat. No.         | Mfr. No. | Description  | Qty.   |
|------------------|----------|--|--------|
| <b>N6025-29</b>  | 2020     | Multisample osmometer                                    | 1/ea   |
| <b>N6025-32</b>  | 202825   | Disposable sample tubes                                  | 500/ea |
| <b>N6025-31</b>  | 202840   | Probe wiper ring   | 50/ea  |
| <b>N6025-55</b>  | 202850   | Swab cleaner kit   | 50/bx  |
| <b>N6008-20A</b> | 3MA005   | 50 mOsm calibration standard - 10 x 2mL                  | 10/pk  |
| <b>N6008-21A</b> | 3ML085   | 850 mOsm calibration standard - 10 x 2mL                 | 10/pk  |
| <b>N6025-27</b>  | 3LA201   | 2,000 mOsm calibration standard - 10 x 5mL               | 10/pk  |
| <b>N6008-30</b>  | 3MA029   | Clinitrol™ 290 mOsm reference solution - 10 x 2mL        | 10/pk  |
| <b>3LA028</b>    | 3LA028   | Osmolality linearity set 100 to 2,000 mOsm - 5 x 2 x 5mL | 1/ea   |
| <b>3MA028</b>    | 3MA028   | Protinol® 3-level serum control kit - 9 x 3mL            | 1/ea   |
| <b>N6025-28</b>  | 3LA085   | Renol™ 2-level urine control kit - 8 x 3mL               | 1/ea   |
| <b>N6024-9</b>   | FLA835   | Thermal printer paper                                    | 5/pk   |

### Advanced® Model 3250 Single-Sample Osmometer

**ADVANCED INSTRUMENTS** - The Advanced® Model 3250 single-sample osmometer utilizes the freezing-point method for an accurate determination of total concentration. It features a traditional liquid cooling bath design and offers a wide measurement range of 0 to 4,000 mOsm using a 250 $\mu$ L sample size. It is ideally suited for routine osmolality testing in the clinical laboratory and also for research applications in pharmaceutical, academic and industrial laboratory settings.



#### Specifications:

|                             |  |
|-----------------------------|--|
| Sample size .....           | 250 $\mu$ L  |
| Typical testing time .....  | 2-3 minutes  |
| Resolution .....            | 1 mOsm/kg H <sub>2</sub> O   |
| Linearity .....             | Less than $\pm$ 1% from a straight line over calibrated range  |
| Repeatability .....         | $\pm$ 2 mOsm/kg H <sub>2</sub> O (1SD) between 0 and 400 mOsm/kg H <sub>2</sub> O; $\pm$ 0.5% (1SD) between 400 and 4,000 mOsm/kg H <sub>2</sub> O |
| Dimensions (H x W x D)..... | 16 x 13 x 18 in.   |
| Power requirements .....    | 100 to 130V or 200 to 250VAC (50/60 Hz)  |

#### Ranges

|           |   |
|-----------|---|
| Low ..... | 0 to 2,000 mOsm/kg H <sub>2</sub> O     |
| High..... | 1,400 to 4,000 mOsm/kg H <sub>2</sub> O |

| Cat. No.        | Mfr. No. | Description  | Qty.   |
|-----------------|----------|--|--------|
| <b>N6025-30</b> | 3250     | Model 3250   | 1/ea   |
| <b>N6025-11</b> | 3LA825   | Disposable sample tubes                                  | 500/pk |
| <b>N6024-15</b> | 3DA811   | Heat transfer fluid - 150mL bottle                       | 1/ea   |
| <b>N6025-18</b> | 3LA011   | 100 mOsm calibration standard - 10 x 5mL                 | 10/pk  |
| <b>N6024-12</b> | 3LA051   | 500 mOsm calibration standard - 10 x 5mL                 | 10/pk  |
| <b>N6025-19</b> | 3LA091   | 900 mOsm calibration standard - 10 x 5mL                 | 10/pk  |
| <b>N6024-13</b> | 3LA151   | 1500 mOsm calibration standard - 10 x 5mL                | 10/pk  |
| <b>N6025-27</b> | 3LA201   | 2,000 mOsm calibration standard - 10 x 5mL               | 10/pk  |
| <b>N6025-8</b>  | 3LA029   | Clinitrol™ 290 mOsm reference solution - 10 x 5mL        | 10/pk  |
| <b>3LA028</b>   | 3LA028   | Osmolality linearity set 100 to 2,000 mOsm - 5 x 2 x 5mL | 1/ea   |
| <b>3MA028</b>   | 3MA028   | Protinol® 3-level serum control kit - 9 x 3mL            | 1/ea   |
| <b>N6025-28</b> | 3LA085   | Renol™ 2-level urine control kit - 8 x 3mL               | 1/ea   |
| <b>N6024-9</b>  | FLA835   | Thermal printer paper                                    | 5/pk   |

# Osmometers



## Advanced® Model 3320 Micro Osmometer

**ADVANCED INSTRUMENTS** - The Advanced® Model 3320 micro osmometer is a single sample osmometer designed to provide fast, accurate test results using a 20 $\mu$ L sample. It combines proven freezing-point technology and single-step sampling with a functional design that is both simple to operate and easy to maintain. It is ideally suited for routine osmolality testing in clinical diagnostic, pharmaceutical and industrial laboratory settings.

### Specifications:

|                             |  |
|-----------------------------|--|
| Sample size .....           | 20 $\mu$ L   |
| Typical testing time .....  | 60 seconds   |
| Resolution.....             | 1 mOsm/kg H <sub>2</sub> O   |
| Range .....                 | 0 to 2,000 mOsm/kg H <sub>2</sub> O  |
| Linearity .....             | Less than $\pm$ 1% from a straight line over calibrated range  |
| Repeatability .....         | $\pm$ 2 mOsm/kg H <sub>2</sub> O (1 SD) between 0 and 400 mOsm/kg H <sub>2</sub> O; $\pm$ 0.5% (1 SD) between 400 and 2,000 mOsm/kg H <sub>2</sub> O |
| Dimensions (H x W x D)..... | 14 x 14 x 15 in.   |
| Power requirements .....    | 100 to 240VAC (50/60 Hz)   |

| Cat. No.         | Mfr. No. | Description  | Qty.   |
|------------------|----------|--|--------|
| <b>N6008-7</b>   | 3320     | Model 3320 micro osmometer                               | 1/ea   |
| <b>N6008-10</b>  | 3MA800   | Sample tips and chamber cleaners                         | 500/ea |
| <b>N6008-20A</b> | 3MA005   | 50 mOsm calibration standard - 10 x 2mL                  | 10/pk  |
| <b>N6008-21A</b> | 3ML085   | 850 mOsm calibration standard - 10 x 2mL                 | 10/pk  |
| <b>N6025-27</b>  | 3LA201   | 2,000 mOsm calibration standard - 10 x 5mL               | 10/pk  |
| <b>N6008-30</b>  | 3MA029   | Clinitrol™ 290 mOsm reference solution - 10 x 2mL        | 10/pk  |
| <b>3LA028</b>    | 3LA028   | Osmolality linearity set 100 to 2,000 mOsm - 5 x 2 x 5mL | 1/ea   |
| <b>3MA028</b>    | 3MA028   | Protinol® 3-level serum control kit - 9 x 3 mL           | 1/ea   |
| <b>N6025-28</b>  | 3LA085   | Renol™ 2-level urine control kit - 8 x 3mL               | 1/ea   |
| <b>N6008-11</b>  | 3M0825   | Ease-Eject™ sampler - 20 $\mu$ L                         | 1/ea   |
| <b>N6024-20</b>  | 3M0827   | Sampler calibration key - 20 $\mu$ L                     | 1/ea   |
| <b>N6008-11P</b> | 3M0828   | Sampler plunger wire                                     | 2/pk   |
| <b>N6024-26A</b> | 3D3835   | Thermal paper  | 5/pk   |



## Fiske® 210 Micro Sample Osmometer

**ADVANCED INSTRUMENTS** - The Fiske® Model 210 freezing-point osmometer provides accurate osmolality results in less than 90 seconds requiring only a 20 $\mu$ L sample. The fully accessible probe design is easy to clean and service. To use, pipette sample into a disposable sample tube and place the tube into the test chamber. Lower the probe into the sample and push the "test" button. Results are displayed in keypad window.

### Specifications:

|                              |  |
|------------------------------|--|
| Sample size .....            | 20 $\mu$ L   |
| Test time.....               | Less than 90 seconds   |
| Resolution .....             | 1 mOsm/kg H <sub>2</sub> O   |
| Range .....                  | 0 to 2,000 mOsm/kg H <sub>2</sub> O  |
| Linearity .....              | Less than $\pm$ 1% from a straight line over calibrated range  |
| Repeatability .....          | $\pm$ 2 mOsm/kg H <sub>2</sub> O (1 S.D.) between 0 and 400 mOsm/kg H <sub>2</sub> O; $\pm$ 0.5% (1 S.D.) between 400 and 2,000 mOsm/kg H <sub>2</sub> O |
| Dimensions (W x D x H) ..... | 12 x 9½ x 12 in.   |
| Power requirements .....     | 100 to 240VAC, 50/60 Hz  |

| Cat. No.         | Mfr. No. | Description  | Qty.   |
|------------------|----------|--|--------|
| <b>N6008-4</b>   | 210      | Model 210 osmometer                                      | 1/ea   |
| <b>N6011-1</b>   | 110825   | Sample tubes and probe cleaners                          | 250/pk |
| <b>N6008-20A</b> | 3MA005   | 50 mOsm calibration standard - 10 x 2mL                  | 10/pk  |
| <b>N6008-21A</b> | 3MA085   | 850 mOsm calibration standard - 10 x 2mL                 | 10/pk  |
| <b>N6025-27</b>  | 3LA201   | 2,000 mOsm calibration standard - 10 x 5mL               | 10/pk  |
| <b>N6008-30</b>  | 3MA029   | Clinitrol™ 290 mOsm reference solution - 10 x 2mL        | 10/pk  |
| <b>3LA028</b>    | 3LA028   | Osmolality linearity set 100 to 2,000 mOsm - 5 x 2 x 5mL | 1/ea   |
| <b>3MA028</b>    | 3MA028   | Protinol® 3-level serum control kit - 9 x 3mL            | 1/ea   |
| <b>N6025-28</b>  | 3LA085   | Renol™ 2-level urine control kit - 8 x 3mL               | 1/ea   |

## Accessories and Supplies for Micro-OSMETTE™ Osmometers

PRECISION SYSTEMS

| Cat. No.  | Mfr. No. | Description                   | Qty.     |
|---|----------|-------------------------------|----------|
| <b>Use with P5004 and PS5004F</b>                     |          |                               |          |
| PS2023  | 2023     | Disposable sample tube - 50µL | 500/pk   |
| <b>Use with PS2430, PS2430F, PS2430E and PS2430EF</b> |          |                               |          |
| PS2020  | 2020     | Sample tube - 30µL            | 1,000/pk |
| P2017   | 2017     | Multi-OSMETTE™ probe          | 1/ea     |

## Accessories and Supplies for OSMETTE II™ and OSMETTE III™ Osmometers

PRECISION SYSTEMS - For use with OSMETTE II™ osmometers PS5005 and PS5005F and OSMETTE III™ osmometers PS5010 and PS5010F.

| Cat. No. | Mfr. No. | Description                                       | Qty.     |
|----------|----------|---|----------|
| PS2048   | 2048     | Pipette tip, (10µL) and CLEANETTES™ chamber wipes | 1,000/pk |

## Controls for Precision Systems Instruments

PRECISION SYSTEMS - Calibration standards are for use with osmometers and cryoscopes.

| Cat. No. | Mfr. No. | Description  | Qty.  |
|----------|----------|--|-------|
| PS2202   | 2202     | Controls - 5mL ampule - 10 of 290 mOsm - 1/ea of 100 mOsm and 500 mOsm | 12/pk |
| PS2201   | 2201     | Control - 5mL ampule 100 mOsm  | 12/pk |
| PS2205   | 2205     | Control - 5mL ampule 500 mOsm  | 12/pk |

## Micro-OSMETTE™ High-Sensitivity 50µL Osmometer

PRECISION SYSTEMS - The Micro-OSMETTE™ freezing-point osmometer is a portable unit with a 50µL sample size and highly reliable, fully automatic operation. Space-saving design—just 5 in. wide. Simple to use—just lower the head and the test begins. Solid state cooling and easy-clean probe provide high reliability.

Supplied with manual, sample tubes, four 125mL bottles of standards and one pack of 290 controls.



### Specifications:

|                     |   |
|---------------------|---|
| Sample volume ..... | 50µL  |
| Accuracy .....      | <500 mOsm/Kg: ± 2 mOsm/Kg<br>>500 mOsm/Kg: ± 0.5%cv |
| Testing time .....  | 60 sec.   |
| Range .....         | 0 to 3,000 mOsm/kg                                  |
| Dimensions.....     | 5 x 15 x 10 in.                                     |

| Cat. No. | Mfr. No. | Description     | Qty. |
|----------|----------|-----------------|------|
| P5004    | 5004     | 115V - 50/60 Hz | 1/ea |



## OSMETTE III™ High-Sensitivity 10µL Osmometer

PRECISION SYSTEMS - The OSMETTE III™ runs 10µL samples for one of the smallest sample available in a freezing-point osmometer. It features self-identifying flexible calibration, 3 min. warm-up and 60 to 90 sec. test time.

Supplied with manual, printer paper and ribbon, pipette tips, chamber wipes, four 125mL bottles of standards and one pack of 290 controls.

### Specifications:

|                     |   |
|---------------------|---|
| Sample volume ..... | 10µL  |
| Accuracy .....      | <500 mOsm/Kg: ± 2 mOsm/Kg<br>>500 mOsm/Kg: ± 0.5%cv |
| Testing time .....  | 60 sec.   |
| Range .....         | 0 to 2,000 mOsm/kg                                  |
| Dimensions.....     | 8.5 x 12 x 4 in.                                    |

| Cat. No. | Mfr. No. | Description    | Qty. |
|----------|----------|----------------|------|
| PS5010   | 5010     | 115V, 50/60 Hz | 1/ea |

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# Safety Cabinets and Fume Hoods



## Gloves, Hands and Sleeves for Protector® Glove Boxes

LABCONCO - Use these gloves, hands and sleeves with Protector® glove boxes. Gloves feature a one-piece seamless design and are complete with O-rings. The glove material is 0.015G thick. Butyl gloves provide high impermeability to water vapor, gases and toxic chemicals and are resistant to oxygenated solvents and most oxidizing chemicals. Sleeves L5281-27 and -15 can be used with either neoprene or latex hands.

| Cat. No.                | Mfr. No. | Description       | Qty. |
|-------------------------|----------|-------------------|------|
| <b>Gloves</b>           |          |                   |      |
| L5283-17                | 5005601  | Butyl, size 9½    | 2/pk |
| <b>Hands</b>            |          |                   |      |
| L5281-34                | 5033100  | Neoprene, size 10 | 2/pk |
| <b>Neoprene sleeves</b> |          |                   |      |
| L5287-15                | 5005900  | Accordion         | 2/pk |
| L5281-27                | 5005800  | Straight          | 2/pk |



## Protector® Fiberglass Filtered Glove Box

LABCONCO - This glove box uses ambient air to provide user protection from extremely hazardous particulates for applications such as nanoparticle manipulation, toxic powder weighing, pharmaceutical research and biochemistry. Microorganisms, low-level radiochemicals, chemical carcinogens and asbestos may also be used in these boxes. Available with a fiberglass liner, the box has a built-in blower with speed control capable of airflow from 15 CFM to 85 CFM depending on voltage and frequency and inlet and outlet HEPA filters that are 99.99% efficient on 0.3 micron particulates. The box features an LCD display and programmable alarm levels of volume dilution rates in cubic feet per minute, air changes/minute and main chamber pressure. The electrical receptacle is wall-mounted on the interior right hand side, and there is an interior left-hand side wall-mounted pass-through with plug. Illumination exceeds 120 footcandles, and particulate containment is <20 nanograms per cubic meter as confirmed by SafeBridge Consultants, Incorporated.

The laminated safety glass window is ¾ in. thick and has a 36 x 27.7 in. viewing area. The exterior of the glove box is constructed of powder-coated steel for superior corrosion resistance. Includes one pair of neoprene gloves, size 9¾ in., with clamps, 6 ft. power cord and plug.

### Specifications:

Power requirements ..... 100-115V, 50/60 Hz, 10A  
Ship wt..... 500 lbs.

| Cat. No.  | Mfr. No. | Description           | Qty. |
|-----------|----------|-----------------------|------|
| L5218-249 | 5065010  | With fiberglass liner | 1/ea |



Navigating challenges,  
discovering solutions.

# Safety Cabinets and Fume Hoods



## Thermo Scientific 1300 Series A2 Biological Safety Cabinets

THERMO SCIENTIFIC - The 1300 Series biological safety cabinets deliver exceptional efficiency, safety and value for daily applications.

- Containment—smart flow design automates airflow compensation and balancing
- Comfort—10° sloped front for comfort and ergonomics
- Convenience—intuitive control panel for at-a-glance monitoring
- Savings—efficient dual DC motors deliver operational cost savings and low heat emissions

| Cat. No.                    | Mfr. No. | Description                                   | Qty. |
|-----------------------------|----------|---|------|
| <b>3 ft. safety cabinet</b> |          |   |      |
| KL1342                      | 1342     | 3 ft. - 8 in. sash opening - 120V 50/60 Hz    | 1/ea |
| 1320                        | 1320     | 3 ft. - 10 in. sash opening                   | 1/ea |
| 1323                        | 1323     | 3 ft. - 10 in. sash opening - stainless steel | 1/ea |
| <b>4 ft. safety cabinet</b> |          |   |      |
| KL1395                      | 1395     | 4 ft. - 8 in. sash opening                    | 1/ea |
| 1305                        | 1305     | 4 ft. - 8 in. sash opening - stainless steel  | 1/ea |
| <b>5 ft. safety cabinet</b> |          |   |      |
| KL1369                      | 1369     | 5 ft. - 10 in. sash opening                   | 1/ea |
| <b>6 ft. safety cabinet</b> |          |   |      |
| KL1337                      | 1337     | 6 ft. - 8 in. sash opening - stainless steel  | 1/ea |
| KL1387                      | 1387     | 6 ft. - 10 in. sash opening                   | 1/ea |



## Basic™ 47 Laboratory Hoods

LABCONCO - Choose these hoods for rooms with ceilings below 8 ft. and for shallow countertops. Available with or without a blower, the hoods are constructed of epoxy-coated 16G steel on the interior and exterior. They have a tempered, safety glass counterbalanced sash, 10 in. diameter duct collar(s), two switches, a removable front panel, a removable air foil and a two-piece adjustable baffle. The right side fixture panel is factory-prepared to accept up to three service fixtures, one duplex electrical receptacle and a Guardian™ Air Flow Monitor. Right-side wall accepts one side-wall-mounted cupsink with turret (fixtures not included). The hood liner top is factory-prepared for two apparatus rods (rods not included). Four ft. Basic™ 47 hoods are ideal as individual workstations. Dimensions for the hood without blower (W x D x H): 47 x 25 x 48 in.; static pressure loss does not exceed 0.35 in. H<sub>2</sub>O at 100 fpm (720 cfm). Hood with blower is 53 in. H; overcomes a maximum external static pressure of 0.25 in. H<sub>2</sub>O at 100 fpm (720 cfm). Supporting work surface, base cabinet or stand, blower and ductwork are required and each sold separately.

| Cat. No. | Mfr. No. | Description  | Qty. |
|----------|----------|--|------|
| L5250-31 | 2247400  | Hood without blower  | 1/ea |
| L5150-30 | 2247300  | Hood with blower   | 1/ea |
| L5301-14 | 4882803  | 48 x 30 in. laboratory hood<br>work surface - for use with<br>Basic™ 47 hood | 1/ea |

# Safety Cabinets and Fume Hoods



## Fiberglass 30 Laboratory Fume Hood

LABCONCO - Use this compact hood for research, educational and clinical applications that require a small working space and efficient fume removal. Constructed of glacier white dry powder epoxy-coated steel, it features a corrosion-resistant, one-piece molded fiberglass interior liner and a pivoting air foil. The hood also has a tempered, safety glass vertical rising sash with a powder-coated aluminum handle. A fixture panel on the hood's right side is designed to accept up to three service fixtures, one electrical duplex and one airflow monitor. Service fixtures kits, electrical duplex receptacle kits and air monitors are available separately.

Hood L5501-40 includes a built-in, corrosion-resistant direct drive exhaust blower capable of overcoming a maximum external static pressure of 0.12 in. H<sub>2</sub>O at 310 CFM (100 fpm) and prewired 100W, vapor-resistant, incandescent lighting and light and blower switches. Supporting work surface, base cabinet or stand and ductwork are required and each sold separately.

| Cat. No. | Mfr. No. | Description (W x D x H)  | Qty. |
|----------|----------|--|------|
| L5501-40 | 3030000  | 30 x 30.16 x 48 in. - 115V, 60 Hz  | 1/ea |
| F1307-30 | 4882806  | 30 x 30 in. laboratory hood work surface - for use with Fiberglass 30 hood | 1/ea |

## Paramount® Ductless Enclosures

LABCONCO - This ductless fume hood is a self-contained work station that allows for safe handling of organic, formaldehyde, acid gas, sulfur compounds or ammonia chemical fumes and vapors as well as particulates. Airflow and filter status are digitally displayed. Advanced electronic commutated motor (ECM) technology uses less energy and runs quieter than comparable models. No ducting is required. Exclusive features: patented slotted rear baffle to promote horizontal laminar airflow, Clean-Sweep™ air foil, upper containment sash foil, upper dilution air supply. Accommodates various filters based on application (sold separately). Seven filter options are available: Activated Carbon Filter for Organic Vapors; Impregnated Carbon Filter for Acid-Sulfur; Impregnated Carbon Filter for Ammonia-Amine; Impregnated Carbon Filter for Formaldehyde-Formalin; Mixed Bed Carbon Filter for Organic Vapors; Acid-Sulfur and Ammonia-Amine; Impregnated Carbon Filter for Radioisotopes and HEPA Filter for Particulates (sold separately).



| Cat. No. | Mfr. No. | Description (W x D x H)  | Qty. |
|----------|----------|--|------|
| F63200   | 6963200  | 2 ft. - 2 filters - 24 x 29 x 44 in. - 115V, 50/60 Hz, 5A      | 1/ea |
| F63301   | 6963301  | 3 ft. tall - 4 filters - 36 x 29 x 53 in. - 115V, 50/60 Hz, 5A | 1/ea |

## Protector® Premier® Laboratory Hoods

LABCONCO - Protector Premier Fiberglass Fume Hoods have a one-piece liner of specially formulated, fiberglass-reinforced polyester, which offers corrosion and fire resistance and easy clean up. There are no seams where deterioration can occur or where contaminants can collect. These general-purpose hoods are ideal for corrosive fumes but should not be used with perchloric acid, or radioactive or biological hazards



These by-pass hoods feature the largest unobstructed sightline available—37.5 in. from work surface to header panel. Other features include Eco-Foil™ air foil that corrects natural turbulence while keeping cords out of the way, powder-coated steel exterior, safety glass sash, and molded fiberglass exhaust collar. Standard hoods include T8 fluorescent lighting. Explosion-proof (EP) models are available.

Customize your hood with optional service fixtures that accommodate air, gas, vacuum or water lines. Complete your fume hood with a variety of accessories including blowers, work surfaces, storage cabinets, fire extinguishers and air flow monitors (all sold separately).

| Cat. No.  | Mfr. No.  | Description   | Qty. |
|-----------|-----------|---|------|
| 100400000 | 100400000 | 4 ft. hood - remote blower required, with sash open 28 in. - exhausts 725 CFM at 0.22 static pressure - 115V  | 1/ea |
| 100600000 | 100600000 | 6 ft. hood - remote blower required, with sash open 28 in. - exhausts 1180 CFM at 0.41 static pressure - 115V | 1/ea |

# Safety Cabinets and Fume Hoods

## Protector® Work Stations

LABCONCO - Protector® Work Stations are specifically designed for the needs of pathologists and histotechnologists. These enclosures rely on patented containment-enhancing features and face velocities from 60 to 100 fpm to rid the laboratory of solvent vapors associated with gross sectioning, trimming, cover slipping and staining. Protector® Work Stations are ideal for cramped or crowded labs as they feature a low profile to fit easily under standard upper cabinets.



Protector® Work Stations with built-in blower are offered for laboratories where ducting to the outside is not feasible. These enclosures accommodate two large carbon filters—Organic, Formaldehyde and/or Ammonia—used in any combination. The filters keep low concentrations of these chemicals below OSHA-recommended, time-weighted average (TWA) levels, restoring clean air to the laboratory. Carbon filters are sold separately.

Protector® Work Stations geared for connection to a remote blower or house exhaust system offer protection from a broad range of chemicals and are recommended when chemical concentrations are high, unknown or unpredictable.



| Cat. No.  | Mfr. No. | Description                               | Qty. |
|-----------|----------|---|------|
| L3930-000 | 3930000  | Built-in blower - 115V, 60 Hz, 10A        | 1/ea |
| L3930-001 | 3930001  | Remote blower required - 115V, 60 Hz, 10A | 1/ea |

## Purifier® Class I Safety Enclosures

LABCONCO - When applications do not require product protection, choose these Class I safety enclosures as an economical alternative to Class II laminar flow cabinets. Available in 2 ft. and 3 ft. widths, these Class I enclosures help protect you from agents with Biosafety Level 1, 2 or 3 containment. Enclosures have a low discharge volume that reduces cross currents and provides quiet operation from 49 to 67 dB. Units include a fluorescent lamp with a 254nm UV light that turns on while the enclosure is not in use. Sturdy, epoxy-coated aluminum frame and durable, corrosion-resistant steel rear plenum and baffle. Built-in exhaust HEPA filter saves space and is 99.99% effective on 0.3μ particles. Features upper dilution air supply and Clean-Sweep™ air foil. Includes an upper containment sash foil and side-entry air foils that enhance containment by allowing air to sweep across the interior glass surfaces. Sash and sides are made of ¼ in. thick tempered safety glass and provide excellent visibility and protection. The glass also offers more fire-, scratch- and corrosion-resistance than acrylic. The 10° angled, hinged sash allows for a closer view, less glare and a more comfortable operating position than vertical sashes and pivots upward and locks to a loading height of 20 in. Side seals on the sash help contain contaminants. A front-mounted Minihelic® pressure gauge monitors pressure differential across the HEPA filter to help determine loading. These enclosures' light and blower switches are front-mounted and in easy reach of the user. Two utility ports with iris openings for tubing, electrical cords and cables are located at the back.



## Purifier® HEPA-Filtered Enclosures

LABCONCO - Protect users from hazardous chemical powders, dust and allergens in a variety of applications ranging from screening suspicious mail to weighing chemicals with these HEPA-filtered enclosures.

Available in 3 and 4 ft. widths, enclosures feature a built-in exhaust HEPA filter that saves space over a separate exhauster and is 99.99% effective on 0.3μ particles. Upper dilution air supply introduces room air at the top of the sash to dilute concentrations in the upper chamber and constantly projects clean air on the back of the sash. A Clean-Sweep™ air foil with airflow openings provides a constant barrier of protection against contaminants by pulling inflow air from under the air foil, allowing clean air to continually flow over it. Enclosures also include an upper containment sash foil that bleeds air into the enclosure, directing contaminants away from users' breathing zone. Side-entry air foils enhance containment by allowing air to sweep across the interior glass surfaces.

Sash and sides are made of ¼ in. thick tempered safety glass and provide excellent visibility and protection. The glass also offers more fire-, scratch- and corrosion-resistance than acrylic. The 10° angled, hinged sash allows for a closer view, less glare and a more comfortable operating position than vertical sashes and pivots upward and locks to a loading height of 20 in. Side seals on the sash help contain contaminants. A front-mounted Minihelic® pressure gauge monitors pressure differential across the HEPA filter to help determine loading. These enclosures' light and blower switches are front-mounted and in easy reach of the user. Two utility ports with iris openings for tubing, electrical cords and cables are located at the back.

Both L5279-47 and L5279-49 models are available with built-in Guardian™ airflow monitor, which alerts the user if face velocity falls outside of preset range. ETL and CE listed. Power requirement of 115V, 60 Hz, 3A. Supporting work surface and supporting base, available separately, are required.

| Cat. No. | Mfr. No. | Description                           | Qty. |
|----------|----------|---------------------------------------|------|
| L5279-47 | 3980302  | 3 ft. wide enclosure (165 to 230 cfm) | 1/ea |
| L5279-49 | 3980402  | 4 ft. wide enclosure (220 to 310 cfm) | 1/ea |

| Cat. No.                                      | Mfr. No. | Description  | Qty. |
|---|----------|--|------|
| <b>2 ft. wide enclosures (110 to 155 cfm)</b> |          |  |      |
| F20002  | 3980201  | 115V, 60 Hz, 3A                                      | 1/ea |
| F20003  | 3980203  | 115V, 60 Hz, 3A - built-in Guardian™ Airflow monitor | 1/ea |
| <b>3 ft. wide enclosures (165 to 230 cfm)</b> |          |  |      |
| F30003  | 3980303  | 115V, 60 Hz, 3A - built-in Guardian™ Airflow monitor | 1/ea |

To order, call: 800.964.5227

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# Safety Cabinets and Fume Hoods

## Purifier® Logic®+ Class II A2 Biosafety Cabinets

LABCONCO - Purifier® Logic®+ Class II A2 Biosafety Cabinets provide personnel, product and environmental protection suitable for work in biosafety levels 1, 2 and 3. Other appropriate applications include work with antineoplastic drugs, genetic material, carcinogens, allergens and additional substances that generate hazardous airborne particulates. All models are NSF-listed. These cabinets are designed to discharge HEPA-filtered exhaust air directly into the laboratory or into an exhaust system through an optional canopy connection.



Purifier® Logic®+ Biosafety Cabinets excel in user comfort and functionality. The Inclination™ Technology Suite enhances the user experience, including the following: 10° angled sash, patented curved air grille with built-in armrest, fully accessible controls and eye-level color display. The MyLogic™ Operating System provides color-coded menus, status messages and alarms with diagnostic troubleshooting. ECM blower technology allows the unit to consume 60% less energy, allowing for cooler and quieter operation. The Constant Airflow Profile™ (CAP) maintains a precise volume of air as the filters load to provide unparalleled safety. Logic®+ Biosafety Cabinets continuously display HEPA filter life remaining and cabinet status.

Some models include non-welded base stands. For those that do not, base stands are required and are sold separately.

| Cat No.            | Mfr. No.  | Description   | Qty  |
|--------------------|-----------|---|------|
| <b>3 ft. model</b> |           |   |      |
| <b>302381000</b>   | 302381000 | 8 in. sash opening - UV, service fixtures, Vacu-Pass Portal - 115V  | 1/ea |
| <b>302310000</b>   | 302310000 | 10 in. sash opening - 115V  | 1/ea |
| <b>302311000</b>   | 302311000 | 10 in. sash opening - UV, service fixtures, Vacu-Pass Portal - 115V | 1/ea |
| <b>302310100</b>   | 302310100 | 10 in. sash opening - base stand included - 115V                    | 1/ea |
| <b>4 ft. model</b> |           |   |      |
| <b>302481000</b>   | 302481000 | 8 in. sash opening - UV, service fixtures, Vacu-Pass Portal - 115V  | 1/ea |
| <b>302410000</b>   | 302410000 | 10 in. sash opening - 115V  | 1/ea |
| <b>302411000</b>   | 302411000 | 10 in. sash opening - UV, service fixtures, Vacu-Pass Portal - 115V | 1/ea |
| <b>302410100</b>   | 302410100 | 10 in. sash opening - base stand included - 115V                    | 1/ea |
| <b>5 ft. model</b> |           |   |      |
| <b>302581000</b>   | 302581000 | 8 in. sash opening - UV, service fixtures, Vacu-Pass Portal - 115V  | 1/ea |
| <b>302510000</b>   | 302510000 | 10 in. sash opening - 115V  | 1/ea |
| <b>302510100</b>   | 302510100 | 10 in. sash opening - base stand included - 115V                    | 1/ea |
| <b>6 ft. model</b> |           |   |      |
| <b>302680000</b>   | 302680000 | 8 in. sash opening - UV, service fixtures, Vacu-Pass Portal - 115V  | 1/ea |
| <b>302611000</b>   | 302611000 | 10 in. sash opening - 115V  | 1/ea |
| <b>302610100</b>   | 302610100 | 10 in. sash opening - base stand included - 115V                    | 1/ea |

## Purifier® Logic®+ Class II B2 Biosafety Cabinets

LABCONCO - Purifier® Logic®+ Class II B2 Biosafety Cabinets provide personnel, product and environmental protection suitable for work in biosafety levels 1, 2 and 3. Other appropriate applications include work with antineoplastic drugs, genetic material, asbestos and additional substances that generate hazardous airborne particulates. All models are NSF-listed. These cabinets are designed to be hard-ducted to the outside. Since none of the air is recirculated, these biohazard cabinets may be used for work with agents treated with volatile toxic chemicals and radionuclides.



Purifier® Logic®+ Biosafety Cabinets excel in user comfort and functionality. The Inclination™ Technology Suite enhances the user experience, including the following: 10° angled sash, patented curved air grille with built-in armrest, fully accessible controls and eye-level color display. The MyLogic™ Operating System provides color-coded menus, status messages and alarms with diagnostic troubleshooting. ECM blower technology allows the unit to consume 60% less energy, allowing for cooler and quieter operation. The Constant Airflow Profile™ (CAP) maintains a precise volume of air as the filters load to provide unparalleled safety. Logic®+ Biosafety Cabinets continuously display HEPA filter life remaining and cabinet status.

Some models include non-welded base stands. For those that do not, base stands are required and are sold separately.

| Cat. No.                                   | Mfr. No.  | Description   | Qty. |
|--|-----------|---|------|
| <b>4 ft. model with 8 in. sash opening</b> |           |   |      |
| <b>303480000</b>                           | 303480000 | 115V  | 1/ea |
| <b>303481000</b>                           | 303481000 | UV, service fixtures, Vacu-Pass Portal - 115V                   | 1/ea |
| <b>303480100</b>                           | 303480100 | Base stand included - 115V                                      | 1/ea |
| <b>303481100</b>                           | 303481100 | UV, service fixtures, pass through - base stand included - 115V | 1/ea |
| <b>6 ft. model with 8 in. sash opening</b> |           |   |      |
| <b>303680000</b>                           | 303680000 | 115V  | 1/ea |
| <b>303680100</b>                           | 303680100 | UV, service fixtures, Vacu-Pass Portal - 115V                   | 1/ea |
| <b>303681100</b>                           | 303681100 | Base stand included - 115V                                      | 1/ea |
| <b>303681000</b>                           | 303681000 | UV, service fixtures, pass through - base stand included - 115V | 1/ea |

# Safety Cabinets and Fume Hoods



## Purifier® Nonventilated PCR Enclosure

LABCONCO - Designed for conducting polymerase chain reaction procedures, this nonventilated enclosure provides a circulation-free work environment that reduces cross-contamination. Enclosures feature a 254nm ultraviolet lamp and variable digital timer for timed UV light exposure. Timer has eight settings: continuous and 5, 10, 15, 30, 60, 120 and 240 minutes. Enclosures also include a glare-free fluorescent light for interior illumination. Located within easy reach of the user, the three-way light switch powers the fluorescent and UV light one at a time to protect user from inadvertent UV exposure.

The 1/4 in. thick tempered safety glass sash with 7.8 in. high opening is angled 20° for more comfortable viewing and less glare. Loading height of 20 in. Glass is UV-opaque and resistant to UV irradiation. Other features include two utility ports with iris openings to allow passage of tubing and electrical cords and an electrical receptacle inside the enclosure that is powered by the front-mounted auxiliary switch. Bifold doors close the sash opening to help prevent contaminants from entering and protect user when the UV light is on. Constructed of UV-resistant, glacier white and gray powder-coated aluminum and steel, enclosures have a nominal width of 4 ft. Supporting work surface and base are required but not included. ETL listed, CE marked.

| Cat. No.  | Mfr. No. | Description                      | Qty. |
|-----------|----------|----------------------------------|------|
| L3952-400 | 3952400  | PCR enclosure - 115V, 60 Hz, 10A | 1/ea |



## Black Solid Epoxy Work Surface for 4 ft. Protector® XVS Ventilation Stations, Purifier Non-Ventilated PCR Enclosures, Xpert Balance Enclosures, Paramount Ductless Enclosures

LABCONCO - Black chemical-resistant work surface is contoured to fit the dimensions of the enclosure and to contain spills.

| Cat. No. | Mfr. No. | Description  | Qty. |
|----------|----------|--|------|
| F1307-3  | 3908402  | Black solid epoxy dished work surfaces - 1 in. thick | 1/ea |



## Work Surface with Sink for Protector® Work Stations

LABCONCO - This dish-shaped work surface is designed for use with Protector® Work Stations L3930-000, -001 and -020. It contains spills and accommodates standard dissecting boards. Corrosion-resistant surface is designed to not absorb liquids or stain. Surface includes a 10 x 14 x 6 in. deep molded epoxy sink with a chrome-plated gooseneck faucet with vacuum breaker, two chrome-plated faucet controls and a spray nozzle with hose. Requires a 1.5 in. drain connection.

| Cat. No.  | Mfr. No. | Description            | Qty. |
|-----------|----------|------------------------|------|
| L6942-003 | 6942003  | Work surface with sink | 1/ea |



## Carbon Filters for Protector® Work Stations with Built-In Blower

LABCONCO - These carbon filters are appropriate for use with current model Protector® Work Stations and are suitable for vapors from organics, formaldehyde and ammonia.

| Cat. No.  | Mfr. No. | Description                | Qty. |
|-----------|----------|----------------------------|------|
| L3924-200 | 3924200  | 4 ft. organic vapor filter | 1/ea |
| L3924-201 | 3924201  | 4 ft. formaldehyde filter  | 1/ea |



## Solid Epoxy Dished Work Surfaces

LABCONCO - These black, chemical-resistant work surfaces help contain spills. They are contoured to fit the dimensions of Labconco's Purifier® Vertical Clean Benches, Filtered PCR Enclosures, Purifier® Class I Safety Enclosures and HEPA Filtered Enclosures. Choose from three sizes.

| Cat. No. | Mfr. No. | Description (W x D x H)                        | Qty. |
|----------|----------|--|------|
| L5279-36 | 3909900  | 24 x 29 x 1 in. - 2 ft. benches and enclosures | 1/ea |
| L5279-37 | 3909901  | 36 x 29 x 1 in. - 3 ft. benches and enclosures | 1/ea |
| L5279-38 | 3909902  | 48 x 29 x 1 in. - 4 ft. benches and enclosures | 1/ea |

# Safety Cabinets and Fume Hoods



## 6 ft. Electric Hydraulic Lift Base Stand

LABCONCO - This adjustable base stand allows you to position your 6 ft. hood or enclosure to accommodate people of different heights and wheelchair users. Designed to support up to 1,000 lbs., the stand features a durable 1 3/4 in. tubular epoxy-coated steel frame with a glacier-white finish and a 2 x 3 in. tubular steel support frame. The stand is adjustable from 25 1/2 to 33 1/2 in. in height. The electric stand has an up/down switch and four powder-coated die-cast feet with levelers.

| Cat. No. | Mfr. No. | Description (W x D)  | Qty. |
|----------|----------|--|------|
| L5600-35 | 3780102  | 6 ft. electric hydraulic lift base stand - 115V, 60 Hz, 2.4A | 1/ea |



## Welded Telescoping Base Stands for Labconco Fume Hoods, Safety Cabinets and Enclosures

LABCONCO - Designed to support Labconco fume hoods, safety cabinets and enclosures, these welded base stands are made of durable 1 3/4 in. tubular, white powder-coated steel. They have telescoping legs so they can be adjusted to seven height positions in 1 in. increments from 27 1/2 to 33 1/2 in. Base stands of multiple widths can be mixed and matched to equal the width of the hood they support. Stands are available with fixed feet for stationary use or with 5 in. diameter toe-locking casters for mobility.

| Cat. No.  | Mfr. No. | Description (W x D)  | Qty. |
|---|----------|--|------|
| <b>Base stands with fixed feet for use with</b>                     |          |  |      |
| L5600-3   | 3746702  | 4 ft. models of the following: Basic Hood, Protector® Hood, Protector® Work Station, Protector® XVS Station, Purifier® PCR Enclosure, Purifier® Class I or HEPA Filtered Enclosure, Purifier® Clean Bench, XPert Enclosure | 1/ea |
| L5302-13  | 3730300  | 3 ft. Purifier® Logic®+ or Purifier® Cell Logic®+ Biosafety Cabinet  | 1/ea |
| L5302-14  | 3730400  | 4 ft. Purifier® Logic®+ or Purifier® Cell Logic®+ Biosafety Cabinet  | 1/ea |
| L5302-15  | 3730600  | 5 ft. Purifier® Logic®+ or Purifier® Cell Logic®+ Biosafety Cabinet  | 1/ea |
| <b>Base stands with 5 in. dia. toe-locking casters for use with</b> |          |  |      |
| L3746-710   | 3746710  | 2 ft. - Purifier® Vertical Clean Bench, Filtered PCR Enclosure, Class I Enclosure, HEPA-Filtered Enclosure, Paramount® Ductless Enclosure  | 1/ea |
| L5600-25  | 3746711  | 3 ft. Purifier® Class I Enclosure, Purifier® HEPA Filtered Enclosure, Purifier® Clean Bench, Filtered PCR Enclosure, Paramount® Ductless Enclosure   | 1/ea |
| L5600-23  | 3730310  | 3 ft. Purifier® Logic®+ or Purifier® Cell Logic®+ Biosafety Cabinet  | 1/ea |
| L5600-28  | 3730410  | 4 ft. Purifier® Logic®+ or Purifier® Cell Logic®+ Biosafety Cabinet  | 1/ea |
| L5600-30  | 3730610  | 5 ft. Purifier® Logic®+ or Purifier® Cell Logic®+ Biosafety Cabinet  | 1/ea |

## Expertise

**Cardinal Health is an experienced, dependable partner that knows the lab business and solves problems.**

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### Clear View Storage Cabinet

SANDUSKY LEE - Durable acrylic doors provide full visibility of contents. Fully adjustable shelves on 2 in. centers plus raised bottom shelf. Three point door-locking system. Meets ANSI/BIFMA shelf standards. Powder-coat finish. Shipped assembled with the exception of the handle. Dimensions (W x D x H) 46 x 18 x 72 in.

| Cat. No.   | Mfr. No.      | Description     | Qty. |
|------------|---------------|-----------------|------|
| E461872-07 | EA4V461872-07 | Storage cabinet | 1/ea |



### Transport Mobile Clear View Cabinet

SANDUSKY LEE - Durable acrylic doors provide full visibility of contents. Fully adjustable shelves on 2 in. centers plus raised bottom shelf. Three point door-locking system. Meets ANSI/BIFMA shelf standards. Patented heavy-duty caster base. Powder-coat finish. Shipped assembled with the exception of the handle and casters. Dimensions (W x D x H) 46 x 18 x 78 in.

| Cat. No.   | Mfr. No.       | Description            | Qty. |
|------------|----------------|------------------------|------|
| T461872-07 | TA4V 461872-07 | Mobile storage cabinet | 1/ea |



### Flammable Safety Storage Cabinets

EAGLE MANUFACTURING - These storage cabinets allow flammable liquids to be stored near work areas. They are constructed with 18G steel double-walled sides, top, bottom and doors with a 1½ in. air space between the walls. Both vents, with 2 in. threaded fittings, have a fire baffle and cap. Cabinets feature beige powder-coat finish with a FLAMMABLE warning in red. They also have a grounding attachment, three-point keylock and 2 in. raised leak-resistant doorsills. Each shelf is adjustable, supported by four brackets and can support 350 lbs. Models with single shelf have a capacity of 30 gal. and have dimensions of 43 x 18 x 44 in. while models with two shelves have a capacity of 45 gal. and have dimensions of 43 x 18 x 65 in. An additional shelf is available separately. Factory Mutual (FM) approved.

| Cat. No.                           | Mfr. No.  | Description      | Qty. |
|------------------------------------|-----------|------------------|------|
| <b>1 self-closing sliding door</b> |           |                  |      |
| E1930BEIGE                         | 1930BEIGE | 1 shelf          | 1/ea |
| E1945BEIGE                         | 1945BEIGE | 2 shelves        | 1/ea |
| <b>2 manual-closing doors</b>      |           |                  |      |
| E1932BEIGE                         | 1932BEIGE | 1 shelf          | 1/ea |
| E1947BEIGE                         | 1947BEIGE | 2 shelves        | 1/ea |
| E1915                              | 1915      | Additional shelf | 1/ea |

### Safety Storage Cabinet

EAGLE MANUFACTURING - Use this cabinet to store small containers (up to 5 gal. capacity) of flammable and nonflammable acids and corrosive liquids. All interior and exterior surfaces, including shelves, are finished with blue epoxy powder coating for superior protection against chemical attack in the event of a spill or splash. For additional protection, cabinet is supplied with linear high-density polyethylene trays for shelves and bottom. The cabinet is constructed of double-wall, 18G steel with 1½ in. air space between the walls. Shelf depth is 14¾ in. Both upper and lower vents have fire baffle plus grounding attachments, three-point keylock and 2 in. raised, leak-resistant doorsills. Model has two doors. Meets NFPA Code 30 requirements. Not for sulfuric, nitric or hydrochloric acid storage.



| Cat. No. | Mfr. No. | Description (H x W x D)                      | Qty. |
|----------|----------|--|------|
| ECRA32   | CRA32    | 44 x 43 x 18in. - 30 gal. capacity - 1 shelf | 1/ea |

# Storage

## Safety Cabinets



### Stackable Safety Cabinet

EAGLE MANUFACTURING - Ideal for storing small containers of flammables, this 15 gal. stackable cabinet can be used on countertops, workbenches or the floor. It is constructed of 18G steel with a yellow high-gloss powder finish and a warning label with FLAMMABLE printed in red. Sides, top, bottom and doors are double-walled with a 1½ in. air space between walls. Both vents, with 2 in. threaded fittings, have fire baffle and cap. Cabinet also has two manual-closing doors and 2 in. raised leak-resistant doorsill, a grounding attachment and a three-point keylock. The 1¾ in. deep shelf is adjustable, supported by four brackets and can support 350 lbs. Dimensions (W x D x H): 43 x 18 x 22¼ in. Weight: 135 lbs.

| Cat. No. | Mfr. No. | Description               | Qty. |
|----------|----------|---------------------------|------|
| EADD-15  | ADD-15   | Stackable storage cabinet | 1/ea |



### Nonmetallic Acids/Corrosives Storage Cabinets

JUSTRITE - These cabinets offer excellent chemical resistance to highly corrosive liquids such as phenol, nitric acid and sulfuric acid. Their long-lasting wood construction provides exceptional strength and the stainless steel handles and hinges resist damage. Shelves are adjustable to accommodate a wide variety of containers. Cabinets come with adjustable leg levelers, Haz-Alert™ reflective labels and a double key set for safety and security.

| Cat. No.  | Mfr. No. | Description (H x W x D)                               | Qty. |
|-----------|----------|---|------|
| S1347-102 | 24120    | Holds 6 - 2.5L bottles - 18.5 x 24 x 16 in.           | 1/ea |
| S1347-37A | 24140    | Holds 36 - 2.5L bottles - 1 shelf - 35¾ x 36 x 22 in. | 1/ea |



### Flammable Waste Storage Cabinets

JUSTRITE - Choose these white cabinets for temporary on-site storage of flammable or combustible wastes. Features include double-wall construction, a 2 in. leak-resistant sill, a three-point stainless steel bullet latching system, Haz-Alert™ reflective labeling, U-Loc™ padlock-compatible handle with three bullet latches and leveler feet. Model S1339-60A has one adjustable Spillslope™ shelf with a manually closing door and dimensions 65 x 59 x 34 in. Code states that no more than 60 gal. may be Class I and Class II liquids.

| Cat. No.  | Mfr. No. | Description       | Qty. |
|-----------|----------|-------------------|------|
| S1339-60A | 8991053  | Two 55 gal. drums | 1/ea |



### Piggyback Storage Cabinets

JUSTRITE - These piggyback cabinets fit atop standard nonsliding door 30 gal. or 45 gal. safety cabinets to provide expanded or segregated storage of flammable materials. They can be bench- or wall-mounted and feature double-wall construction, dual 2 in. vent openings and a leak-resistant sill. Cabinets also feature Haz-Alert™ labeling and U-Loc™ padlockable handle with three bullet latches for extra security. Cabinet S1347-42A includes an adjustable Spillslope™ shelf constructed from galvanized steel. Doors open and close manually. Cabinets meet OSHA Standard 1910.106 for flammable and combustible liquids for storage cabinets. Factory Mutual (FM) approved.

| Cat. No.  | Mfr. No. | Description (H x W x D)    | Qty. |
|-----------|----------|----------------------------|------|
| S1347-41A | 891300   | 12 gal. - 18 x 43 x 18 in. | 1/ea |
| S1347-42A | 891700   | 17 gal. - 24 x 43 x 18 in. | 1/ea |

**Solid Polyethylene Acid Cabinet**

JUSTRITE - Justrite's Solid Polyethylene Acid Cabinet is ideal for the storage of harsh corrosive acids. This "solid wall" high-density polyethylene (HDPE) plastic cabinet has excellent chemical resistance to handle the most corrosive chemicals and make clean-up a snap. Features a protective, all-welded bottom sump and a clean, sleek design to complement laboratory settings. Fully-welded, liquid-tight 2 in. (51mm) sump contains accidental spills.



Poly hinges, door handle and internal latching mechanism means there are no metal parts to corrode. Door hasp accepts padlock for security against unauthorized use. Cabinet includes adjustable steel leg levelers and patent pending Haz-Alert™ reflective warning labels in 3 languages.

| Cat. No. | Mfr. No. | Description        | Qty. |
|----------|----------|--------------------|------|
| 1347-73  | 24004    | 1 door, countertop | 1/ea |

**Space Saver Safety Cabinets**

JUSTRITE - These 12 gal. capacity cabinets are designed for areas where small quantities of flammables are stored. Cabinets feature one adjustable shelf, a keylock in handle and leveling feet. Bright yellow powder-coat finish with Haz-Alert™ reflective labeling. Cabinet S1347-24A has a self-closing, stainless-steel bullet-latch self-latching door and is equipped with a fusible link "hold open" device. Dimensions (H x W x D): 35 x 23 1/4 x 18 in. Cabinets comply with NFPA Code 30 flammable liquids code and OSHA Standard 1910.106 for flammable and combustible liquids. Factory Mutual (FM) approved.



| Cat. No.  | Mfr. No. | Description           | Qty. |
|-----------|----------|-----------------------|------|
| S1347-23A | 891200   | Manually closing door | 1/ea |
| S1347-24A | 891220   | Self-closing door     | 1/ea |

**Sure-Grip® EX Storage Cabinet**

JUSTRITE - For hands-on convenience with minimal exposure, choose this two-door cabinet for onsite storage of flammables or combustibles. It includes one adjustable shelf. Stores three 5 gal. safety cans on shelf and three 5 gal. safety cans in bottom of cabinet. Factory Mutual (FM) tested and approved. The Sure-Grip EX® Storage Cabinet is designed in accordance with specifications set forth in the National Fire Protection Association Code 30. Complies with OSHA 29 CFR 1910 regulations. External dimensions (H x W x D): 35 x 36 x 24 in.



| Cat. No. | Mfr. No. | Description                  | Qty. |
|----------|----------|------------------------------|------|
| 25330A   | 893300   | Yellow 30 gal. - manual door | 1/ea |

**Sure-Grip® EX Acids/Corrosives Cabinet**

JUSTRITE - This double-walled cabinet has U-Loc™ padlockable handle with three bullet latches for extra security. The Spillslope™ shelves and bottom are covered with removable polyethylene shelf covers designed to hold acid containers and trap spills. Cabinet is finished in acid-resistant blue powder-coat paint with large Haz-Alert™ reflective ACID label on front. Complies with NFPA Code 30 flammable liquids code and OSHA Standard 1910.106 for flammable and combustible liquids. Not recommended for storage of phenol, nitric or sulfuric acid. Factory Mutual (FM) approved.

| Cat. No.  | Mfr. No. | Description (H x W x D)              | Qty. |
|-----------|----------|--------------------------------------|------|
| S1347-21A | 893002   | 30 gal. - 44 x 43 x 18 in. - 1 shelf | 1/ea |

**Sure-Grip® EX One-Door Countertop Safety Storage Cabinets**

JUSTRITE - These compact countertop flammable liquid storage cabinets are designed for storage of small quantities of flammable liquids. You can mount the 4 gal. cabinets on the wall or use them on the countertop. Cabinets have one adjustable Spillslope™ shelf, 2 in. vent openings, a three-point stainless steel bullet self-latching system, a U-Loc™ handle that can be padlocked for extra security and leveling feet. Cabinets meet OSHA Standard 1910.106 for storage cabinets. Dimensions (W x D x H): 17 x 17 x 22 in.



| Cat. No.   | Mfr. No. | Description         | Qty. |
|------------|----------|---------------------|------|
| S1347-101A | 890420   | Self-closing door   | 1/ea |
| S1347-72A  | 890400   | Manual closing door | 1/ea |

**Looking for a specific product?**

If you know the catalog number of the product you need, you can use the Catalog Number Index to direct you to the correct page.

# Storage

## Safety Cabinets



### Sure-Grip® EX Piggyback Acids/Corrosives Cabinet

JUSTRITE - This piggyback cabinet can be mounted on top of standard 30 or 45 gallon cabinets and feature welded, double-wall steel and a protective, special chemical-resistant blue powder-coat paint finish. Features Haz-Alert™ reflective labeling for high visibility in dark areas and a U-Loc™ handle that can be padlocked for extra security. Includes three-point stainless steel bullet-latch locking doors with keylocks and leak-resistant bottom. Model S1347-34A dimensions 18 x 43 x 18 in. Not recommended for storage of phenol, nitric or sulfuric acid. Factory Mutual (FM) approved. Complies with OSHA and meets NFPA.

| Cat. No.  | Mfr. No. | Description            | Qty. |
|-----------|----------|------------------------|------|
| S1347-34A | 891302   | 12 gal. - manual close | 1/ea |



### Sure-Grip® EX Safety Can Storage Cabinets

JUSTRITE - Designed to conform to NFPA Code 30 flammable liquids code and OSHA Standard 1910.106 for flammable and combustible liquids, these safety cabinets provide central storage and organization of flammables. They feature double-wall construction with 1½ in. air space. Also included are four leveler feet, a three-point U-Loc™ handle with three stainless steel bullet latch that can be padlocked for extra security, Haz-Alert™ reflective labeling, Spillslope™ shelves and 2 in. leak-resistant sill. Finished in yellow powder-coat paint. Cabinets S1347-3, -4 and -6 have two manually closing doors. A replacement shelf is available separately for use with 30, 40 and 45 gal. cabinets. Factory Mutual (FM) approved.

| Cat. No. | Mfr. No. | Description (H x W x D) | Qty. |
|----------|----------|-------------------------|------|
|----------|----------|-------------------------|------|

#### Self-closing cabinets

|           |        |                                      |      |
|-----------|--------|--------------------------------------|------|
| S1347-1A  | 893020 | 30 gal. - 1 shelf - 44 x 43 x 18 in. | 1/ea |
| S1347-2A  | 894520 | 45 gal. - 2 shelf - 65 x 43 x 18 in. | 1/ea |
| S1339-61A | 896020 | 60 gal. - 2 shelf - 65 x 34 x 34 in. | 1/ea |

#### Manually closing cabinets

|          |        |   |      |
|----------|--------|---|------|
| S1347-3A | 893000 | 30 gal. - 1 shelf - 44 x 43 x 18 in.                          | 1/ea |
| S1347-4A | 894500 | 45 gal. - 2 shelf - 65 x 43 x 18 in.                          | 1/ea |
| S1347-6A | 896000 | 60 gal. - 2 shelf - 65 x 34 x 34 in.                          | 1/ea |
| S1347-5A | 29937  | Replacement shelf for 30, 40,<br>45 gal. and piggyback models | 1/ea |

### Sure-Grip® EX Safety Storage Cabinet

JUSTRITE - When workspace is scarce, use this safety cabinet for your storage needs. Holds up to 22 gal. Cabinet has a yellow chemical-resistant, powder-coat finish and features a small footprint and a space-saving design. Its double-wall, air-insulated welded steel construction provides fire resistance. Haz-Alert™ reflective labeling is highly visible when illuminated by a flashlight beam and helps firefighters locate volatile liquids under fire conditions; one trilingual (English, French, Spanish) warning label appears at the top of the cabinet and a secondary label appears at the bottom. Cabinet has three adjustable Spillslope™ shelves that safely direct spills to the back and bottom of the 2 in. leak-resistant sump for spill control, dual vents, adjustable leveling feet and grounding connector. Door opens and closes manually and has a U-Loc™ padlockable paddle handle with a slip-resistant grip. Cabinet is Factory Mutual (FM) approved and meets OSHA Standard 29 CFR 1910.106. Ship. wt.: 209 lbs. Dimensions (H x W x D): 65 x 23.25 x 18 in.



| Cat. No.   | Mfr. No. | Description                              | Qty. |
|------------|----------|--|------|
| S1347-432A | 892200   | Safety storage cabinet -<br>manual close | 1/ea |



### Sure-Grip® EX Undercounter Safety Cabinets

JUSTRITE - These double-walled, 18G steel cabinets fit flush under counter or benchtop and are finished in bright yellow powder-coat paint with Haz-Alert™ reflective label with "Flammable Keep Fire Away" print. Cabinets also feature Spillslope™ shelving and U-Loc™ padlockable handle with three bullet latches. Fitted with a recessed 3.5 in. H x 2.5 in. D kickplate to mount flush with other cabinetry. Cabinet S1347-32A has manually closing double doors that open to 180°. Cabinets have a 1½ in. air space between walls, a 2 in. leak-resistant sill and a kick recess. Two vent openings in the back wall permit hookup to existing vent system. Vent openings include flame arresters and have 2 in. pipe thread for easy attachment to vent connections. Vent caps and one adjustable shelf are provided. Factory Mutual (FM) approved. Dimensions (H x W x D): 35 x 35 x 22 in. Complies with OSHA and meets NFPA.

| Cat. No.  | Mfr. No. | Description                      | Qty. |
|-----------|----------|----------------------------------|------|
| S1347-32A | 892300   | Manually closing doors - 22 gal. | 1/ea |
| S1347-33A | 892320   | Self-closing doors - 22 gal.     | 1/ea |

# Storage

## Safety Cabinets/Safety Cans

### Yellow Compac Cabinet

JUSTRITE - When storing smaller quantities of flammable liquids at a work station or adding to existing storage capacities, these cabinets make it possible to store flammables safely even when available space is at a minimum. Supplied with one adjustable shelf, these cabinets have the same great features of Justrite's larger cabinets.



Compac Safety Cabinets fit almost anywhere and provide protection even where space is at a premium. Only 23.25 in. wide, model S1347-43A holds 15 gallons of flammables. Factory Mutual (FM) approved, complies with OSHA and meets NFPA.

| Cat. No.         | Mfr. No. | Description (H x W x D)                 | Qty. |
|------------------|----------|---|------|
| <b>S1347-43A</b> | 891520   | 44 x 23.25 x 18 in. - 1 door self close | 1/ea |

### Safety Cabinet Shelves

JUSTRITE - These cabinet accessories offer an opportunity to expand storage and add new convenience to existing cabinets or customize your new cabinet with additional shelves to meet specific work flow needs. Galvanized steel shelves hold up to 350 lbs. and adjust on 3 in. increments for versatile storage. They can be used on both lever-style handle cabinets and Sure-Grip®-style cabinets.



| Cat. No.        | Mfr. No. | Description  | Qty. |
|-----------------|----------|--|------|
| <b>25909A</b>   | 29944    | Shelf fits all 60 gal. 2-door cabinets                 | 1/ea |
| <b>S1347-5A</b> | 29937    | Shelf fits 17 gal. piggyback, 30, 40, 45 gal. cabinets | 1/ea |

### Oily Waste Can

EAGLE MANUFACTURING - This oily waste can offers fire-safe temporary storage of solvents, waste rags, shavings and other materials subject to spontaneous combustion. The 14 gal. polyethylene can is designed not to rust or dent and is resistant to most chemical compounds. It features a self-closing lid with foot lever. Can is compliant with OSHA Standards 1910.108 and 1910.106. Factory Mutual (FM) approved. Dimensions 22 x 18 x 21 in. Weight: 16 lbs.



| Cat. No.       | Mfr. No. | Description   | Qty. |
|----------------|----------|---------------|------|
| <b>E937-FL</b> | 937-FL   | Red - 14 gal. | 1/ea |

### Stainless Steel Lab Safety Can

EAGLE MANUFACTURING - This 1 gal. (3.8L) stainless steel can has electrically welded seams, a flame arrester and a Teflon® gasket. The 13 in. high (33cm) oblong shape conserves shelf space. Not recommended for use with strong acids, hydroxides or solvents. The safety can is Factory Mutual (FM) approved.



| Cat. No.     | Mfr. No. | Description    | Qty. |
|--------------|----------|----------------|------|
| <b>E1301</b> | 1301     | Lab safety can | 1/ea |

To order, call: 800.964.5227

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### Liquid Disposal Cans

JUSTRITE - These cans are for disposal of hazardous spent liquids. Made of tough, red high-density polyethylene that resists physical abuse and the corrosive effects of fuels and chemicals. The wide spout makes filling easier. All cans include stainless steel operating handle, flame arrester and automatic venting cap. Factory Mutual (FM) approved.



| Cat. No.        | Mfr. No. | Description                | Qty. |
|-----------------|----------|----------------------------|------|
| <b>S1343-2A</b> | 14762    | 2 gal. - 14 1/4 in. height | 1/ea |
| <b>S1343-5A</b> | 14765    | 5 gal. - 20 in. height     | 1/ea |

### Nonmetallic Faucet Safety Can

JUSTRITE - This high-density polyethylene safety can has a self-closing faucet for controlled dispensing of hazardous liquids. The fill spout has a self-closing pressure relief cap with built-in vacuum breaker and double mesh flame arrester. The faucet is mounted 2 in. above the bottom of the can. Flexible faucet exteriors are available. Can S1346-13 is oval to save space and has a stainless steel faucet. Factory Mutual (FM) approved.



| Cat. No.        | Mfr. No. | Description | Qty. |
|-----------------|----------|-------------|------|
| <b>S1346-13</b> | 14169    | 1 gal. oval | 1/ea |

### Safety Plunger Can

JUSTRITE - Use this 24G steel powder-coat finish can when you clean with flammable or volatile liquids. A spring-mounted dasher controls the liquid by forcing a measured amount of fluid to dampen a cleaning cloth. Dasher screen acts as fire baffle. The brass plunger assembly is easily removed for cleaning. Factory Mutual (FM) approved.



| Cat. No.        | Mfr. No. | Description              | Qty. |
|-----------------|----------|--------------------------|------|
| <b>S1339-10</b> | 10108    | 1 qt. - 5 1/8 in. height | 1/ea |

### Type I Metal Safety Can

JUSTRITE - Use this can for proper in-plant storage of flammables. Can features a heavy-duty steel with double-seamed construction and has a single pour spout for convenient filling and pouring. This can includes a stainless steel flame arrester for fast pour-through, a leak-tight, self-closing spout and automatic pressure relief. Hoses and funnels are optional. Features a fixed handle with a trigger-release cap for filling and pouring. Red powder-coat paint finish. Factory Mutual (FM) approved, UL listed.



| Cat. No.       | Mfr. No. | Description                             | Qty. |
|----------------|----------|---|------|
| <b>S1345-1</b> | 10301    | 1 gal. - 7 1/4 O.D. x 11 1/2 in. height | 1/ea |

# Storage

## Safety Cans and Accessories

### Type I Transfer and Storage Lab Cans for Flammables

JUSTRITE - These puncture- and dent-resistant cans are made of tough, high-density red polyethylene and are impervious to most solvents, fuels and chemicals. They feature stainless steel fittings, a small opening, a flame arrester and a self-closing cap. The current carrying carbon insert embedded into rib of container completes grounding path when used with antistatic wires. Choose oval or round.

Oval cans help save shelf space. Oval cans measure 4 $\frac{1}{8}$  W x 7 $\frac{1}{8}$  in. L (12 x 19cm) and all are Factory Mutual (FM) approved.



| Cat. No.  | Mfr. No. | Description                                    | Qty. |
|-----------|----------|--|------|
| S1340-2A  | 14065    | Oval 1/2 gal. can - 9 $\frac{1}{2}$ in. height | 1/ea |
| S1340-1A  | 14160    | Oval 1 gal. can - 12 $\frac{3}{4}$ in. height  | 1/ea |
| S1345-25A | 14561    | Round 5 gal. can - 16 in. height               | 1/ea |

### White Biohazard Waste Can

JUSTRITE - Justrite's Biohazard Waste Containers meet OSHA 29 CFR 1910.1030 for the segregation of infectious waste. They may be used to store contaminated laundry as well as other regulated waste (not to be used for sharps).

Sturdy steel cans feature leak-proof construction with foot-operated self-closing lid. Simple and safe foot pedal operation opens the container cover automatically. Release of pedal then closes can cover to reduce the risk of contamination. A biohazard bag is held securely around the circumference of the can top.



| Cat. No. | Mfr. No. | Description   | Qty.   |
|----------|----------|---|--------|
| 05910    | 05910    | 6 gal. - 11 $\frac{1}{2}$ O.D. x 15 $\frac{1}{2}$ in. height  | 1/ea   |
| 05930    | 05930    | 10 gal. - 13 $\frac{1}{2}$ O.D. x 18 $\frac{1}{4}$ in. height | 1/ea   |
| 05901    | 05901    | Red liner bags  | 100/pk |

### Polyethylene Bottle Jacket Cover

JUSTRITE - This translucent polyethylene bottle jacket is designed to contain glass breakage and to minimize spillage if bottle is dropped. The jacket will protect photosensitive chemicals from degradation by light. Convenient pouring handle. Accommodates 4L bottle (not included). Jacket is reusable.



| Cat. No. | Mfr. No. | Description         | Qty. |
|----------|----------|---------------------|------|
| S1339-66 | 12009    | Bottle jacket cover | 1/ea |

### Polyethylene Pour Funnel

JUSTRITE - This polyethylene pour funnel fits 1/2 and 1 gallon nonmetallic safety cans.



| Cat. No. | Mfr. No. | Description              | Qty. |
|----------|----------|--------------------------|------|
| S1345-61 | 11201    | Polyethylene pour funnel | 1/ea |

### Safety Drum Funnel

JUSTRITE - For disposal of flammable waste, select from brass-constructed drain tubes to accommodate a variety of liquids. When disposing of solvents, a 6 in. or 32 in. flame arrester can be employed. The funnels are constructed of heavy-gauge steel and have a large 10 $\frac{3}{4}$  in. mouth that facilitates easy, quick dumping while reducing spills. Hinged cover minimizes spread of hazardous vapors. Should ignition occur when cover is open, the fusible link will melt at 165°F, snapping the cover closed and extinguishing the fire. Factory Mutual (FM) approved.



| Cat. No. | Mfr. No. | Description                         | Qty. |
|----------|----------|-------------------------------------|------|
| S1347-19 | 08207    | Flammable liquids - 6 in. arrester  | 1/ea |
| S1347-18 | 08205    | Flammable liquids - 32 in. arrester | 1/ea |

### Safety Spill Tray

JUSTRITE - This tray features a plated steel, perforated fire baffle top, 24G steel shell and powder-coat paint finish. The fire baffle protects the contents from fire exposure. Large diameter. Sized to fit standard size safety containers of 5 gallons or less.



| Cat. No. | Mfr. No. | Description | Qty. |
|----------|----------|-------------|------|
| S1344-20 | 10177    | Spill tray  | 1/ea |

### Gray Cease-Fire® Waste Receptacles

JUSTRITE - Justrite Cease-Fire® Waste Receptacles are specially contoured to direct smoke and gas from any fire inside the container, back into the combustion area, cutting off the air supply and extinguishing flames in seconds. Cease-Fire® Receptacles provide round-the-clock protection against trash fires and are suitable for use in plants, hospitals, schools, offices and stores.



Aluminum heads are virtually corrosion-free, providing easy clean-up and long-lasting durability. Cease-Fire® drum bodies are heavy-gauge steel, available with a rust preventative interior coating. Aluminum heads are available separately for use with existing metal drums. 30 gal. is Factory Mutual (FM) approved and UL listed. 55 gal. is FM approved.

| Cat. No.  | Mfr. No. | Description         | Qty. |
|-----------|----------|---------------------|------|
| S1342-70A | 26630G   | 30 gal. (110L) drum | 1/ea |
| S1342-75A | 26655G   | 55 gal. (200L) drum | 1/ea |

# Temperature Recorders

## Thermo Scientific Temperature Chart Recorders

THERMO SCIENTIFIC - Seven-day chart recorders record temperatures from -100°C to 0°C (-40° to +38 on 6183-7). Use pressure-sensitive paper, require no inking. 6 in. (15.2cm) chart. These chart recorders provide 7-day history on 6 in. chart; for use with most freezers and refrigerators.

| Cat. No.  | Mfr. No. | Description  | Qty. |
|-----------|----------|--|------|
| R3894-42  | 6183-6   | Built-in, with red pen, for ultra low-temperature freezers | 1/ea |
| TFS6183-7 | 6183-7   | Built-in, factory installed, panel-mounted                 | 1/ea |

## Thermo Scientific Temperature Chart Recorder Paper

THERMO SCIENTIFIC - For use in freestanding- and panel-mounted chart recorders. 6 in. (15.2cm) dia. Temperature chart recorder paper is for use in 7-day circular temperature chart recorders.

| Cat. No. | Mfr. No. | Description    | Qty.  |
|----------|----------|----------------|-------|
| R3894-6  | 6185     | -115° to +50°C | 50/pk |
| TFS6184  | 6184     | -40° to +25°C  | 50/pk |



## 4 in. (101mm) Chart Paper

DICKSON - Use this 7-day, -22°F to 122°F chart paper with the R8200-360 temperature chart recorder.

| Cat. No.  | Mfr. No. | Description | Qty.  |
|-----------|----------|-------------|-------|
| R8200-370 | C206     | Chart paper | 60/bx |

## 4 in. (101mm) Temperature Chart Recorders

DICKSON - A practical size coupled with 2-3 year battery life makes these 4 in. (101mm) temperature chart recorders a useful monitoring solution. Features 24 hour or 7-day recording. Single AA battery operation. Switchable: Celsius/Fahrenheit. Charts are available separately.



| Cat. No.  | Mfr. No. | Description                                  | Qty. |
|-----------|----------|--|------|
| R8200-360 | SK4350   | -22°F to 122°F (-30°C to 50°C)               | 1/ea |
| R8200-350 | SL4350   | With display, -22°F to 122°F (-30°C to 50°C) | 1/ea |
| R8200-361 | SK4100   | 0°F to 100°F (-18° to 37°C)                  | 1/ea |
| R8200-351 | SL4100   | With display, 0° to 100°F (-18°C to 37°C)    | 1/ea |

To order, call: 800.964.5227

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## 6 in. (152mm) Temperature Chart Recorders

DICKSON - This 6 in. (152mm) line of temperature chart recorders feature a sleek look and feel, precision pen movement, K-thermocouple probes and eight user-selectable temperature ranges. The practical size is suitable for monitoring refrigerators and freezers. R8200-332 has a digital display for easy min./max. temperature monitoring. R8200-335 has alarms with audio/visual on high/low temp limits and relay connections. AC power with battery backup—9V battery. Charts are available separately.



| Cat. No.  | Mfr. No. | Description                                    | Qty. |
|-----------|----------|--|------|
| R8200-331 | KT621    | Recorder with probe                            | 1/ea |
| R8200-332 | KT622    | Recorder with probe and display                | 1/ea |
| R8200-335 | KT625    | Recorder with probe, display, alarms and relay | 1/ea |

## 8 in. Temperature Chart Recorders with K-Thermocouple Remote Probe

DICKSON - Supplied with a large digital display and plug-in K-thermocouple probe for flexibility, these temperature chart recorders offer user-selectable recording times and various temperature ranges. They feature high chart resolution, a rugged and compact enclosure and flip-up pen arm for easy chart and pen changes. Supplied with a 120V power adapter and a four AA battery backup. Dimensions: 9.2 x 9.2 x 3.1 in. (23.4 x 23.4 x 7.9cm). Weight: 9 lbs. Charts are available separately.



| Cat. No. | Mfr. No. | Description                                     | Qty. |
|----------|----------|---|------|
| R8200-24 | KT802    | Digital display, -50°F/C to +500°F/C            | 1/ea |
| R8200-25 | KT803    | Digital display with alarm, -50°F/C to +500°F/C | 1/ea |

## 8 in. Temperature, Humidity and Dew Point Chart Recorder

DICKSON - This chart recorder features an 8 in. circular chart, user-selectable recording times and user-selectable temperature ranges. It has a rugged and compact enclosure, flip-up pen arm for easy chart and pen changes and a four AA battery backup. Switchable: Celsius/Fahrenheit and RH/dew point. Dimensions: 9.2 x 9.2 x 3.1 in. (23.4 x 23.4 x 7.9cm). Weight: 9 lbs. Supplied with 120V power adapter, four AA battery backup and pens. Charts are available separately.



| Cat. No. | Mfr. No. | Description   | Qty. |
|----------|----------|---|------|
| R8200-58 | TH803    | Digital display with remote probe and alarm, -20°F to +185°F (-20°C to +50°C) | 1/ea |

# Temperature Recorders

## Blood Bank Recorder

DICKSON - This unit is perfect for monitoring your blood supplies and tissue samples or specimens. It documents the temperature conditions directly onto a paper chart 24/7 helping you meet FDA, AABB and JCAHO regulations. Features remote probe, audio alarms and AC power with battery backup—9V battery. Dimensions: 3.25 x 7.56 x 7.56 in. Charts are available separately.



| Cat. No. | Mfr. No. | Description   | Qty. |
|----------|----------|---|------|
| 61419-7  | BBR625   | 6 in. (152mm) temperature recorder for blood and tissue banks | 1/ea |

## Compact 3 in. Temperature Chart Recorders

DICKSON - These circular chart recorders are small enough to fit in your hand, yet they provide the accuracy and resolution required for regulatory compliance and quality control. Features 24 hr. or 7-day switchable recording time. The case is rugged enough to withstand the rigors of transportation and storage applications. The 3 in. circular chart provides a permanent record of temperatures in either Fahrenheit or Celsius. Dimensions: 3.7 x 3.7 x 2.2 in. (9.3 x 9.3 x 5.7cm). Weight: 1 lb. Supplied with AA battery, pen and instruction manual. Charts are available separately.



| Cat. No.  | Mfr. No. | Description                  | Qty. |
|-----------|----------|------------------------------|------|
| R8200-324 | SC377    | 4°F to 50°F (-15°C to +10°C) | 1/ea |
| R8200-325 | SC386    | 22°F to 68°F (-5°C to +20°C) | 1/ea |
| R8200-326 | SC387    | 50°F to 96°F (10°C to 35°C)  | 1/ea |



## Replacement Charts for 3-8 in. Chart Recorders

DICKSON - Supplied in box of 60 charts.

| Cat. No.  | Mfr. No. | Description         | Qty.  |
|---|----------|---------------------|-------|
| <b>3 in. chart recorders - 7-day recording time</b> |          |                     |       |
| R8200-319   | C304     | 4°F to 50°F         | 60/bx |
| <b>4 in. chart recorders - 7-day recording time</b> |          |                     |       |
| R8200-64  | C012     | 0°F/C to 100°F/C    | 60/bx |
| R8200-706   | C203     | 0°F/C to 70°F/C     | 60/bx |
| R8200-66  | C017     | -20°F/C to +120°F/C | 60/bx |
| R8200-315   | C181     | -30°F/C to +50°F/C  | 60/bx |
| <b>6 in. chart recorders - 7-day recording time</b> |          |                     |       |
| R8200-175   | C651     | -50°F/C to +50°F/C  | 60/bx |
| R8200-177   | C653     | 0°F/C to ±50°F/C    | 60/bx |
| R8200-181   | C657     | 0°F/C to ±100°F/C   | 60/bx |
| <b>8 in. chart recorders - 7-day recording time</b> |          |                     |       |
| R8200-125   | C414     | -50°F/C to +50°F/C  | 60/bx |

## Replacement Pens for Chart Recorders

DICKSON - Choose from various configurations to fit different types of chart recorders. Each package contains six pens.



| Cat. No.  | Mfr. No. | Description  | Qty. |
|-----------|----------|--|------|
| R8200-222 | P222     | 6 red - for temperature and universal recorders                    | 6/pk |
| R8200-225 | P266     | 3 red, 3 blue - for 2-channel, temperature and universal recorders | 6/pk |

## Temperature and Humidity Data Logger with LCD

DICKSON - Featuring an easy-to-read four-digit LCD, this temperature and humidity data recorder provides high/low alarm, min./max. display, high-speed USB 2.0 connectivity and one-step data transfer using removable flash memory cards. Humidity range is 0% to 95% RH. Unit operates on four AA alkaline batteries or optional AC adapter. Dimensions: 4 x 3 x 1.6 in. (10.2 x 7.7 x 3.9cm). Weight: 3 lbs.



| Cat. No.  | Mfr. No. | Description  | Qty. |
|-----------|----------|--|------|
| R8200-261 | TM320    | With internal sensor only, -4°F to +158°F (-20°C to +70°C) | 1/ea |

## Temperature Data Loggers with LCD

DICKSON - These temperature data recorders with four-digit jumbo LCD offer a range of key features, including high/low alarm, min./max. display, high-speed USB 2.0 connectivity and one-step data transfer using removable flash memory cards. Available with internal sensor only or with plug-in K-thermocouple probes. Units operate on four AA alkaline batteries or optional AC adapter. Dimensions: 4 x 3 x 1.6 in. (10.2 x 7.7 x 3.9cm). Weight: 3 lbs.



| Cat. No.  | Mfr. No. | Description  | Qty. |
|-----------|----------|--|------|
| R8200-236 | SM300    | With internal sensor only, -4°F to +158°F (-20°C to +70°C) | 1/ea |
| R8200-237 | SM320    | With K-thermocouple probe, -4°F to +158°F (-20°C to +70°C) | 1/ea |

## USB Temperature Data Loggers

DICKSON - Monitor and record ambient temperatures with these highly accurate instruments, which feature high-speed USB connectivity, high/low LED alarm, delayed start capability and user-replaceable battery with 1-year life. They offer data storage to 32,000 sample points. Available with single-channel internal sensor for reading air temperature and also with external K-thermocouple sensor for reading temperature in extreme environments or hard-to-reach places. Operate on CR2450 lithium battery. Range: -10°F to +176°F (-23°C to +80°C). Accuracy: ±1.2°F (±0.7°C). Dimensions: 3 x 2 x 0.9 in. (8 x 5.4 x 2.2cm). Weight: 1 lb.



| Cat. No.  | Mfr. No. | Description                    | Qty. |
|-----------|----------|--------------------------------|------|
| R8200-243 | SP125    | Internal sensor only           | 1/ea |
| R8200-245 | SP175    | External K-thermocouple sensor | 1/ea |

# Temperature Recorders

## MDAS-Pro™ Marathon Data Analysis Software (MDAS)

MARATHON PRODUCTS INC - Marathon's Data Analysis Software (MDAS) allows you to view up to 16 multiple traces at one time. It also enables you to transfer the information recorded in the logger to your computer and to view, print and generate a report of the measurement data. The graphic representations include rotating 3-D views, unlimited zooms, temperature data points on the graph, total elapsed time or the exact time when it was recorded. The software has been designed for the Microsoft operating system platforms and is compatible with Windows 98, NT, 2000, XP, Vista and Windows 7.



| Cat. No.        | Mfr. No. | Description   | Qty. |
|-----------------|----------|---------------|------|
| <b>M2010-26</b> | MDAS     | MDAS software | 1/ea |

## microDL™ Data Loggers

MARATHON PRODUCTS INC - The microDL™ is a revolutionary multiuse programmable data logger for displaying and recording temperatures for shipping and storage applications. Now all of your critical biologics, cancer drugs and vaccines can be immediately temperature-qualified. Small, yet so powerful, this investigative temperature-collecting device is your answer for regulatory compliance.



With optional memory sizes of 4K, 8K and 32K and accuracy and resolution of 0.2C, this digital display technology gives you on-the-spot verification that the internal temperatures of your packaged contents meets specifications prior to shipment. Research laboratories and physicians can now immediately validate temperature information for clinical studies and patient administration. Alarm conditions can be programmed for start/delay, high/low, continuous or cumulative time over alarm conditions. Push the start button to view critical temperature information upon arrival. Pressing the start button will display the following information: current temperature, elapsed time in days, MKT (mean kinetic temperature), high temperature, low temperature, alarm time over high temperature, alarm time below low temperature and alarm conditions. The microDL™ is a water-resistant data logger with non-volatile memory for data retention. For a complete analytical solution, simply download all of its data to your PC with the proprietary microDL™ USB Reader and MDAS-Pro™ software. Marathon's easy-to-use software is available for PCs running Microsoft.

Windows 2000, XP, Vista and Windows 7. 21CFR compliant software is available with full database capabilities.

| Cat. No.                                   | Mfr. No. | Description                   | Qty. |
|--|----------|-------------------------------|------|
| <b>EEPROM memory and temperature range</b> |          |                               |      |
| <b>M2010-10</b>                            | MDL4     | 4K, 14°F/161°F (-10°C/72°C)   | 1/ea |
| <b>M2010-13</b>                            | MDL8     | 8K, -40°F/161°F (-40°C/72°C)  | 1/ea |
| <b>M2010-32</b>                            | MDL32    | 32K, -40°F/161°F (-40°C/72°C) | 1/ea |

## microDL™ USB Reader Station

MARATHON PRODUCTS INC - For use with the microDL™ Red and microDL™ Silver series loggers.



### Specifications:

|              |                            |
|--------------|----------------------------|
| Interface    | USB, version 1.1 compliant |
| Height       | 24mm (0.96 in.)            |
| Diameter     | 44.84mm (1.76 in.)         |
| Weight       | 16g (0.5 oz.)              |
| Cable length | 81.3cm (32 in.)            |

| Cat. No.        | Mfr. No.           | Description        | Qty. |
|-----------------|--------------------|--------------------|------|
| <b>M2010-27</b> | MDL READER STATION | USB reader station | 1/ea |

## Circular Chart Temperature Recorders for Panasonic Biomedical Refrigerators

PANASONIC - These temperature chart recorders include a circular chart, 7-day chart drive and 6 in. chart. Choose from built-in or freestanding models. Felt-tip recording pens are available separately.



| Cat. No.                                       | Mfr. No.   | Description  | Qty. |
|--|------------|--|------|
| <b>Built-in temperature chart recorders</b>    |            |  |      |
| <b>MTR-C954</b>                                | MTR-C954   | Single pen   | 1/ea |
| <b>MTR-C955</b>                                | MTR-C955   | Dual pen   | 1/ea |
| <b>Freestanding temperature chart recorder</b> |            |  |      |
| <b>MTR-C958</b>                                | MTR-C958   | Single pen   | 1/ea |
| <b>Recording pen</b>                           |            |  |      |
| <b>R252</b>                                    | R252       | Red recording pen  | 1/ea |
| <b>Chart paper</b>                             |            |  |      |
| <b>C738176</b>                                 | C738176    | For 4°C refrigerators/recorder MTR-C954                              | 1/ea |
| <b>C740306REV</b>                              | C740306REV | For combination units or -30°C freezers/recorders MTR-C954 and -C955 | 1/ea |
| <b>C7100386REV</b>                             | C7100386RE | For -86°C freezers/recorder MTR-C954                                 | 1/ea |

## Panasonic Accessories for Temperature Recording

PANASONIC

| Cat. No.          | Mfr. No.   | Description                                  | Qty.  |
|-------------------|------------|--|-------|
| <b>MTR-0620LH</b> | MTR-0620LH | Chart paper recording strip                  | 1/ea  |
| <b>RP-06</b>      | RP-06      | Chart paper strip for use with MTR-0620LH    | 1/ea  |
| <b>MTR-85H</b>    | MTR-85H    | Recording chart strip for Panasonic freezers | 1/ea  |
| <b>RP-G04</b>     | RP-G04     | Recording paper for use with MTR G04         | 50/bx |
| <b>PG-R</b>       | PG-R       | Recording pen                                | 1/ea  |

# Weighing



## Weigh Boat® Containers

DYN-A-MED - These lightweight and disposable plastic Weigh Boat® containers simplify handling and transferring of liquid or solid samples during weighing procedures.

A stable, flat bottom and a flat-turned gripping edge make them easier to manipulate than unwieldy papers or heavy glass and porcelain labware. Flexible boats can be squeezed to control pouring, then can be rinsed with a wash-bottle stream, transferring the total sample.

The smooth surface finish and rounded interior corners facilitate the removal of granular and powdered samples. Non-wetting polystyrene is resistant to inorganic solutions. Precision manufacturing methods hold individual Weigh Boat® containers to close weight tolerance, simplifying taring procedures. 500 containers per package.

| Cat. No.  | Mfr. No. | Description      | Qty.     |
|-----------|----------|------------------|----------|
| B2045-5   | 80050    | Micro - 7mL      | 12 pk/cs |
| B2045-10  | 80055    | Standard - 100mL | 4 pk/cs  |
| B2045-15A | 80060    | Large - 250mL    | 2 pk/cs  |

## Weighing



## ASTM Class 4 Balance Mass Set

OHAUS - For routine analytical and technical work, these masses are analytically shaped with concave bases. Set is made of certified stainless steel down to 200mg and aluminum down to 1mg. Set is arranged in an integrally hinged polypropylene covered box with an individually covered compartment for fractional weights. Includes 84mm forceps.

| Cat. No. | Mfr. No. | Description  | Qty. |
|----------|----------|--|------|
| B1900-50 | 291-01   | ASTM Class 4 - no certificate, stainless steel/aluminum 50g x 1mg weight set | 1/ea |



## ASTM Class 6 Balance Mass Set

OHAUS - For routine analytical and technical work, these masses are analytically shaped with concave bases. Set is made of certified stainless steel from 2,000g to 1g. Set is arranged in an integrally hinged polypropylene covered box.

| Cat No.  | Mfr. No. | Description                 | Qty. |
|----------|----------|-----------------------------|------|
| B1903-05 | 80850116 | ASTM 6 calibration mass set | 1/ea |

**Cardinal Health offers more than 80,000 laboratory products from 400 leading manufacturers.**



B1900-103



B1900-100

### Adventurer® Pro Analytical and Precision Balances

OHAUS - The OHAUS Adventurer® Pro series counts, sums, holds and delivers traceable results. Analytical models have capacities from 65g to 260g and incorporate a frameless draftshield design for easy access and cleaning. Precision models offer capacities from 53g to 8,100g. Key features include RS232, full GLP/GMP data output, dynamic weighing and multiple weigh units. Optional features include InCal™ and approved models. SmarText™ software utilizes a two-line backlit LCD to easily guide users through balance set-up, operation and application mode procedures by displaying critical information.

| Cat. No.                                  | Mfr. No. | Description              | Qty. |
|---|----------|--------------------------|------|
| <b>Capacity/platform size/readability</b> |          |                          |      |
| <b>B1900-103</b>                          | AV53     | 50g/120mm/1mg            | 1/bx |
| <b>B1903-01</b>                           | AV213    | 210g/120mm/1mg           | 1/bx |
| <b>B1900-100</b>                          | AV212    | 210g/120mm/0.01g         | 1/bx |
| <b>B1903-03</b>                           | AV313    | 310g/120mm/1mg           | 1/bx |
| <b>B1900-226</b>                          | AV313C   | 310g/120mm/1mg           | 1/bx |
| <b>B1900-105</b>                          | AV812    | 810g/149 x 162mm/0.01g   | 1/bx |
| <b>B1900-232</b>                          | AV812C   | 810g/168 x 180mm/0.01g   | 1/bx |
| <b>B1903-58</b>                           | AV2102   | 2,100g/168 x 180mm/0.01g | 1/bx |
| <b>B1900-215</b>                          | AV2101C  | 2,100g/168 x 180mm/0.1g  | 1/bx |
| <b>B1900-101</b>                          | AV4101   | 4,100g/149 x 162mm/0.1g  | 1/bx |
| <b>B1900-231</b>                          | AV8101C  | 8,100g/168 x 180mm/0.1g  | 1/bx |

### Adventurer™ Pro Precision Balance

OHAUS - The Adventurer™ Pro Precision Balance features:

- SmarText™ Software utilizing text prompts to guide users through application use and balance setup
- QuadraStance™ design incorporates four feet to provide superior footprint stability on any surface to enhance weighing stability
- InCal™ ensures weighing accuracy with internal calibration
- USB or second RS232 interface option allows connection to multiple peripherals



#### Specifications:

Power requirements ..... AC adapter (included)  
Dimensions W x H x D ..... 8.7 x 7.5 x 11.8 in.  
Pan size ..... 6.6 x 7.1 in.  
Capacity ..... 3100g  
Readability ..... 0.01g

| Cat. No.         | Mfr. No. | Description       | Qty. |
|------------------|----------|-------------------|------|
| <b>B1900-224</b> | AV3102C  | Precision balance | 1/ea |

### CS Portable Balances

OHAUS - The OHAUS CS Compact Scale is a lightweight, portable scale perfectly suited for use in laboratory, industrial, education and home use applications. Applications can include forensic testing, quality control, formulation, soil sampling, postal weighing and dietary. Includes stainless steel pan and AC adapter. Superior RF protection for use near cell phones and production areas. Available with postal charts. 145 x 133mm platform.



| Cat. No.           | Mfr. No. | Description                      | Qty. |
|--------------------|----------|----------------------------------|------|
| <b>B1900-60</b>    | CS200    | 200g capacity - 0.1g readability | 1/ea |
| <b>B1901-99</b>    | CS2000   | 2,000g capacity - 1g readability | 1/ea |
| <b>B1902-00</b>    | CS5000   | 5,000g capacity - 1g readability | 1/ea |
| <b>Accessories</b> |          |                                  |      |
| <b>B1902-04</b>    | 90524-66 | AC adapter for compact scales    | 1/ea |

### Dial-O-Gram® Balances

OHAUS - These balances feature the convenience of direct reading from an engraved dial to help speed fine measurements. A permanent, self-regulating magnetic damping feature minimizes oscillations and speeds weighing. Covered, self-aligning bearings and precision-ground steel knives help ensure accuracy. Balances consist of two graduated beams with a center indicating slide poise. They are ruggedly constructed for years of service and are insensitive to out-of-level conditions. Beams are constructed of die-cast aluminum and pan and bow are made of stainless steel. Balance B1900-13 includes a self-storing specific gravity platform. Pan and bow are keyed numerically, permitting easy handling of laboratory materials.



#### Specifications:

Readability ..... 0.1g  
Vernier dial ..... 10 x 0.1g

#### Model B1900-13

Front beam ..... 100 x 10g  
Rear beam ..... 200 x 100g  
Pan size ..... 8.9 dia. x 0.7cm deep  
Tare capacity ..... No

Front beam ..... 500 x 100g  
Rear beam ..... 100 x 10g  
Pan size ..... 15.2cm plate  
Tare capacity ..... 225g

| Cat. No.        | Mfr. No. | Description                        | Qty. |
|-----------------|----------|------------------------------------|------|
| <b>B1900-13</b> | 310-00   | 310g balance                       | 1/ea |
| <b>B1900-11</b> | 1650-00  | 610g balance (2,610g with weights) | 1/ea |

# Weighing

## Weighing

### Discovery Semi-Micro and Analytical Balances

OHAUS - The OHAUS Discovery series of semi-micro and analytical balances combine unmatched weighing performance with OHAUS' innovative SmarText™ software. The Discovery features durable glass and steel construction and advanced AutoCal™ dual mass internal calibration, performance found in premium-priced balances. 90mm platform.



| Cat. No.  | Mfr. No. | Description                       | Qty. |
|-----------|----------|-----------------------------------|------|
| B1900-233 | DV114C   | 110g capacity - 0.1mg readability | 1/ea |
| B1900-234 | DV214C   | 210g capacity - 0.1mg readability | 1/ea |



### Explorer® Pro High-Capacity Balance

OHAUS - This balance features an extra-large 11 x 14 in. platform, ideal for laboratory applications. It also offers check and differential weighing, statistical functions, formulation and filling.

#### Specifications:

Readability ..... 0.1g  
Repeatability ..... 0.1g  
Linearity ..... ±0.4g

| Cat. No.  | Mfr. No. | Description      | Qty. |
|-----------|----------|------------------|------|
| B1900-109 | EP12001C | 12,000g capacity | 1/bx |

### Handheld Scales

OHAUS - These portable scales include a 0.4 in. display for enhanced viewing and a snap-on protective molded cover, as well as an auto shut-off feature and low-battery, overload and underload indicators. High-contrast LCD for easy viewing in low light. Superior radio frequency protection for use near cell phones, registers and computers.



They offer weighing in basic grams. Scales B1902-02 and -03 also provide ounce, troy ounce and pennyweight options. The display on scales B1902-02 and -03 are capable of illuminating at the push of a button. All models can be easily calibrated and require only 3 seconds for stabilization. 83 x 76mm platform.

| Cat No.  | Mfr. No. | Description                      | Qty. |
|----------|----------|----------------------------------|------|
| B1902-02 | HH120    | 120g capacity - 0.1g readability | 1/ea |
| B1902-03 | HH320    | 320g capacity - 0.1g readability | 1/ea |



### Harvard Trip Balances

OHAUS - These highly versatile balances are ideal for comparative weighing with known standards and can be used for virtually any massing application. Magnetic damping minimizes oscillation and speeds weighing. Harvard trip balances offer a choice of angled beams with center reading poises and a spring-loaded, zero adjust compensator. Precision-ground hardened steel knives, covered self-aligning bearings and a cross-braced aluminum alloy box end beam are all featured. All models have stainless steel plate weighing platforms and angle view beams with black values on white backgrounds for easy viewing.

#### Specifications:

Capacity ..... 2kg  
Readability ..... 0.1g  
Sensitivity ..... 0.1g  
Beam ..... Double  
Metric ..... 10 x 0.1g/200 x 10g  
Platform size ..... 15.2cm dia.

| Cat. No. | Mfr. No. | Description                              | Qty. |
|----------|----------|--|------|
| B1900-18 | 1550-SD  | 2kg balance - no tare capacity           | 1/ea |
| B1900-19 | 1560-SD  | 2kg balance - 225g (8 oz.) tare capacity | 1/ea |

### Ohaus Spring Scale

OHAUS - This spring scale is a versatile way to measure a variety of materials. Available in both dial- and pull-type models, with a wide range of weighing units including grams, pounds, ounces and newtons.



| Cat. No. | Mfr. No. | Description              | Qty. |
|----------|----------|--------------------------|------|
| 8008-MN  | 8008-MN  | Spring scale 5000 x 100g | 1/ea |



## Scout® Pro Portable Electronic Balances

OHAUS - Designed for use in laboratory, industrial and education applications, these portable balances are designed to fit your needs. They feature multiple weighing units including grams, kilograms, pounds, ounces, a combined pound/ounce display, troy ounces and pennyweights. The multiple application modes include enhanced parts counting, percentage weighing, totalization and display hold. The high-contrast LCD combined with two-key operation makes the balances easy to use. They also have a removable stainless-steel weighing platform, sealed front panel and molded spill ring that helps keep them safe from spills. Choose from balances with round or square weighing surfaces.

| Cat. No.                                     | Mfr. No. | Description                        | Qty. |
|--|----------|------------------------------------|------|
| <b>Round weighing surface - 120mm</b>        |          |                                    |      |
| B1900-118                                    | SP202    | 200g capacity - 0.01g readability  | 1/ea |
| B1900-119                                    | SP402    | 400g capacity - 0.01g readability  | 1/ea |
| B1900-147                                    | SP401    | 400g capacity - 0.1g readability   | 1/ea |
| <b>Square weighing surface - 165 x 142mm</b> |          |                                    |      |
| B1900-121                                    | SP601    | 600g capacity - 0.1g readability   | 1/ea |
| B1900-117                                    | SP2001   | 2,000g capacity - 0.1g readability | 1/ea |
| B1900-146                                    | SP4001   | 4,000g capacity - 0.1g readability | 1/ea |
| B1900-120                                    | SP6000   | 6,000g capacity - 1g readability   | 1/ea |
| <b>Accessories</b>                           |          |                                    |      |
| B1900-148                                    | 71147376 | USB interface kit (cable included) | 1/ea |



## Triple Beam Balances

OHAUS - These rugged, easy-to-use triple beam balances are designed to provide years of accurate and dependable service. All balances are equipped with two extension pivots on beam end which accept attachment weights B1900-7 (sold separately) to increase capacity. Magnetic damping, easy-to-read tiered beam construction and a spring-loaded zero adjust compensator all help these precision balances deliver accurate, high-speed performance. The alloy box end beam is made of die-cast aluminum. Tare beam and poise are provided with balances B1900-2 and -5 for 225g (8 oz.) tare. Contoured base stores weights.

### Specifications:

Readability ..... 0.1g

### Beams

Front ..... 10 x 0.1g

Center ..... 500 x 100g

Rear ..... 100 x 10g

### Capacity

Without attachment weights ..... 610g

With attachment weights ..... 2610g

| Cat. No.                              | Mfr. No. | Description                                     | Qty. |
|---------------------------------------|----------|---|------|
| <b>Stainless steel plate platform</b> |          |   |      |
| B1900-6                               | 750-S0   | 6 in. dia. platform - no tare capacity          | 1/ea |
| B1900-5                               | 760-00   | 6 in. dia. platform - 225g tare capacity        | 1/ea |
| <b>Stainless steel pan platform</b>   |          |   |      |
| B1900-1                               | 710-00   | 6 in. dia. x 0.75 in. deep - no tare capacity   | 1/ea |
| B1900-2                               | 710-T0   | 6 in. dia. x 0.75 in. deep - 225g tare capacity | 1/ea |



## YA Gold Handheld Pocket Scale

OHAUS - The OHAUS YA series features a SoftTouch outer case, stainless steel weighing pan and hinged protective cover. Bright blue backlit display and ultra-fast stabilization time. Small size allows a comfortable fit in your pocket.

| Cat. No.  | Mfr. No. | Description  | Qty. |
|-----------|----------|--------------|------|
| B1900-300 | YA102    | Pocket scale | 1/ea |

## Expertise

Cardinal Health is an experienced, dependable partner that knows the lab business and solves problems.

- 60 years of experience serving laboratories.
- Dependable service, with tenured representatives who are committed to understanding and attending to customers' needs.
- Sales representatives who help educate lab managers about their options with comparative information about different manufacturers and products.
- Specialty customer service team that manages high-volume, high-value and perishable materials.
- Extensive supply chain and logistics expertise.

# Weighing

## Cast Iron Weights

TROEMNER - Cast Iron Class F Grip Handle Weights are primarily used to test commercial weighing devices by state and local weights and measures officials, device installers and service technicians. These weights may be used to test most accuracy Class III scales, all scales of Class III L or IIII and scales not marked with a class designation. Class F is also acceptable for use verifying scales that have a 0.1% accuracy and lower. Cast Iron Class F Grip Handle Weights larger than 5kg/10 lbs. are legal for trade, so they are acceptable for use in checking devices where the price of the item being purchased is based on its weight.



Choose from a variety of weight denominations and certifications. Weights with a traceable weight certificate are designed for use in organizations that require traceability but do not need to meet any stringent regulatory requirements. The measurement process used for these weights is based on a single standard and utilizes one series of comparisons.

| Cat. No.       | Mfr. No. | Description                                 | Qty. |
|----------------|----------|---|------|
| <b>TR9078</b>  | 9078     | 25 lbs. grip weight                         | 1/ea |
| <b>TR9280T</b> | 9280T    | 5kg grip weight with traceable certificate  | 1/ea |
| <b>TR9284T</b> | 9284T    | 20kg grip weight with traceable certificate | 1/ea |

## Weighing



## Class 1 Stainless Steel Electronic Balance Calibration Weights

TROEMNER - Class 1 weights have a mirror-like finish and are made of high-quality, stainless steel alloy, which offers controlled density, low magnetic susceptibility, good stability and resistance to corrosion and damage. They have an adjusting cavity to allow for adjustment during future calibrations.

Weights are available in a cylindrical design up to 5kg and a stackable grip-handle design from 4 to 30kg. Weights 5kg and below are supplied in protective case. Weight sets include five weights: 100, 200, 300 and 500g and 1kg. All weights are supplied with a statement of accuracy. Also available with traceable calibration certificate or with NVLAP calibration certificate (NVLAP Lab Code 105013-0).

| Cat. No.  | Mfr. No. | Description                | Qty. |
|---|----------|----------------------------|------|
| <b>Weight sets (100g to 1kg)</b>                      |          |                            |      |
| <b>B2185-29</b>                                       | 8170     | With statement of accuracy | 1/ea |
| <b>TR8170T</b>  | 8170T    | With traceable certificate | 1/ea |
| <b>Cylindrical weights</b>                            |          |                            |      |
| <b>B2185-22</b>                                       | 8154     | 30g weight                 | 1/ea |
| <b>B2185-20</b>                                       | 8152     | 50g weight                 | 1/ea |
| <b>B2185-12</b>                                       | 8136     | 300g weight                | 1/ea |
| <b>B2185-10</b>                                       | 8132     | 500g weight                | 1/ea |
| <b>Cylindrical weights with traceable certificate</b> |          |                            |      |
| <b>TR8152T</b>  | 8152T    | 50g weight                 | 1/ea |
| <b>Cylindrical weights with NVLAP certificate</b>     |          |                            |      |
| <b>B2185-16C</b>                                      | 8144W    | 100g weight                | 1/ea |
| <b>TR8134W</b>  | 8134W    | 400g weight                | 1/ea |
| <b>B2185-10C</b>                                      | 8132W    | 500g weight                | 1/ea |



## Class 4 Stainless Steel Electronic Balance Calibration Weights

TROEMNER - Class 4 weights have a satin-like appearance and finish and are made of high-quality, stainless steel alloy, which offers controlled density, low magnetic susceptibility, good stability and resistance to corrosion and damage. An adjusting cavity allows for adjustment during future calibrations.

Weights are available in a cylindrical design up to 5kg and a stackable grip-handle design from 4 to 30kg. Weights 5kg and below are supplied in a protective case. All weights are supplied with a statement of accuracy. Also available with traceable calibration certificate or with NVLAP calibration certificate (NVLAP Lab Code 105013-0).

| Cat. No.  | Mfr. No. | Description | Qty. |
|---|----------|-------------|------|
| <b>Cylindrical weights</b>                            |          |             |      |
| <b>B2185-45</b>                                       | 8452     | 50g weight  | 1/ea |
| <b>Cylindrical weights with traceable certificate</b> |          |             |      |
| <b>TR8432T</b>  | 8432T    | 500g weight | 1/ea |
| <b>Cylindrical weights with NVLAP certificate</b>     |          |             |      |
| <b>TR8444W</b>  | 8444W    | 100g weight | 1/ea |
| <b>TR8438W</b>  | 8438W    | 200g weight | 1/ea |
| <b>TR8432W</b>  | 8432W    | 500g weight | 1/ea |
| <b>TR8428W</b>  | 8428W    | 1kg weight  | 1/ea |



### Metric Precision Troemner UltraClass™ Weight Set

TROEMNER - Choose this precision weight set to use as reference standards. All weight sets are supplied with a statement of accuracy that contains both the date of calibration and the class of each weight. Please note that the statement of accuracy does not provide NIST traceability and is not suitable for strict quality or regulatory requirements. This statement verifies that the product has been manufactured to meet all specifications for its class and has been calibrated using standards traceable to NIST.

UltraClass™ weights 2kg and larger are made of stainless steel. Weights 1g to 1kg are made of Troemner Alloy 8 stainless steel, which possesses low magnetic susceptibility, uniform consistency and high resistance to corrosion. Weights 5 to 500mg are made of stainless steel (30mg weights are made of aluminum). Weights 3mg and smaller are made of aluminum. Weights 1g and larger feature a two-piece construction. The body of the weight is one piece, and the knob of the weight is the second piece. The knob has a thread that screws into the body and is tightened. There is a cavity below the knob thread in the body that contains adjusting material, typically of the same material from which the weight is made. Weights 500mg and smaller feature one-piece construction with one side turned up to make them easy to handle with forceps. The corners and edges of these weights are smooth. The nominal value is etched or stamped on the top surface of the weight and their shape is square. All surfaces are polished to a mirror-like finish and conform to specifications in ANSI/ASTM E617.

| Cat. No.  | Mfr. No. | Description   | Qty. |
|-----------|----------|---|------|
| TR7239-0T | 7239-0T  | 500mg to 10mg weight set with traceable calibration certificate | 1/ea |



### Metric Precision Troemner UltraClass™ Weights

TROEMNER - These precision weights are supplied with a statement of accuracy that contains both the date of calibration and the class of each weight. Please note that the statement of accuracy does not provide NIST traceability and is not suitable for strict quality or regulatory requirements. This statement verifies that the product has been manufactured to meet all specifications for its class and has been calibrated using standards traceable to NIST.

UltraClass™ weights 2kg and larger are made of stainless steel. Weights 1g to 1kg are made of Troemner Alloy 8 stainless steel, which possesses low magnetic susceptibility, uniform consistency and high resistance to corrosion. Weights 5 to 500mg are made of stainless steel (30mg weights are made of aluminum). Weights 3mg and smaller are made of aluminum. Weights 1g and larger feature a two-piece construction. The body of the weight is one piece and the knob of the weight is the second piece. All surfaces are polished to a mirror like finish and conform to specifications in ANSI/ASTM E617. Weights 1mg through 2kg are supplied with a case.

These weights are also available with a NVLAP or traceable calibration certificate (NVLAP Lab Code 105013-0).

| Cat. No.        | Mfr. No. | Description  | Qty. |
|-----------------|----------|--------------|------|
| <b>B2174-22</b> | 7037-0   | 1mg weight   | 1/ea |
| <b>B2174-26</b> | 7033-0   | 10mg weight  | 1/ea |
| <b>B2174-33</b> | 7026-0   | 500mg weight | 1/ea |
| <b>B2174-34</b> | 7025-0   | 1g weight    | 1/ea |
| <b>B2174-38</b> | 7021-0   | 10g weight   | 1/ea |
| <b>B2174-41</b> | 7018-0   | 50g weight   | 1/ea |

#### Weights with NVLAP calibration certificate

|                  |         |              |      |
|------------------|---------|--------------|------|
| <b>TR7033-0W</b> | 7033-0W | 10mg weight  | 1/ea |
| <b>TR7029-0W</b> | 7029-0W | 100mg weight | 1/ea |
| <b>TR7025-0W</b> | 7025-0W | 1g weight    | 1/ea |
| <b>TR7021-0W</b> | 7021-0W | 10g weight   | 1/ea |
| <b>TR7018-0W</b> | 7018-0W | 50g weight   | 1/ea |
| <b>TR7017-0W</b> | 7017-0W | 100g weight  | 1/ea |
| <b>TR7016-0W</b> | 7016-0W | 200g weight  | 1/ea |
| <b>TR7014-0W</b> | 7014-0W | 500g weight  | 1/ea |

#### Weights with traceable calibration certificate

|                  |         |             |      |
|------------------|---------|-------------|------|
| <b>TR7033-0T</b> | 7033-0W | 10mg weight | 1/ea |
|------------------|---------|-------------|------|

## Pricing

Please call your sales or customer service representative to check up-to-the-minute pricing and availability.

# Weighing

## Weighing



### Metric Precision Weight Sets, ANSI/ASTM Class 1

TROEMNER - Troemner Class 1 precision weight sets conform to ANSI/ASTM E617 Class 1 standards. All weight sets are supplied with a statement of accuracy that contains both the date of calibration and the class of each weight. Please note that the statement of accuracy does not provide NIST traceability and is not suitable for strict quality or regulatory requirements. This statement verifies that the product has been manufactured to meet all specifications for its class and has been calibrated using standards traceable to NIST.

Class 1 weights 2kg and larger are made of stainless steel. Weights 1g to 1kg are made of Troemner Alloy 8 stainless steel, which possesses low magnetic susceptibility, uniform consistency and high resistance to corrosion. Weights 5 to 500mg are made of stainless steel (30mg weights are made of aluminum). Weights 3mg and smaller are made of aluminum. Weights 1g and larger feature a two-piece construction. The body of the weight is one piece, and the knob of the weight is the second piece. The knob has a thread that screws into the body and is tightened. There is a cavity below the knob thread in the body that contains adjusting material, typically of the same material from which the weight is made. Weights 500mg and smaller feature one-piece construction with one side turned up to make them easy to handle with forceps. The corners and edges of these weights are smooth. The nominal value is etched or stamped on the top surface of the weight and their shape is square. All surfaces are polished to a mirror-like finish and conform to specifications in ANSI/ASTM E617.

These weights are also available with a traceable certificate or a NVLAP calibration certificate (NVLAP Lab Code 105013-0). The traceable certificate is designed for those laboratories and companies that require traceability but do not need to meet any stringent regulatory requirements. The NVLAP certificate provides compliance in both measurement process and data reported to the customer to meet a variety of standards, including NVLAP Handbook 150-2, ISO 9000, ISO/IEC 17025, FDA, GMP, GLP, DOD, ANSI/NCSL Z540-1 and nuclear requirements. One weight set per each.

| Cat. No.         | Mfr. No. | Description           | Qty. |
|------------------|----------|-----------------------|------|
| <b>TR7233-1T</b> | 7233-1T  | 1mg to 50g weight set | 1/ea |
| <b>TR7229-1T</b> | 7229-1T  | 1g to 50g weight set  | 1/ea |



### Metric Precision Weight Sets, ANSI/ASTM Class 4

TROEMNER - Troemner Class 4 precision weight sets conform to ANSI/ASTM E617 Class 4 standards. All weight sets are supplied with a statement of accuracy that contains both the date of calibration and the class of each weight. Please note that the statement of accuracy does not provide NIST traceability and is not suitable for strict quality or regulatory requirements. This statement verifies that the product has been manufactured to meet all specifications for its class and has been calibrated using standards traceable to NIST.

Class 4 weights 2kg and larger are made of stainless steel. Weights 1g to 1kg are made of Troemner Alloy 8 stainless steel, which possesses low magnetic susceptibility, uniform consistency and high resistance to corrosion. Weights 5 to 500mg are made of stainless steel (30mg weights are made of aluminum). Weights 3mg and smaller are made of aluminum. Weights 1g and larger feature a 2-piece construction. The body of the weight is one piece, and the knob of the weight is the second piece. The knob has a thread that screws into the body and is tightened. There is a cavity below the knob thread in the body that contains adjusting material, typically of the same material from which the weight is made. Weights 500mg and smaller feature one-piece construction with one side turned up to make them easy to handle with forceps. The corners and edges of these weights are smooth. The nominal value is etched or stamped on the top surface of the weight and their shape is square. All surfaces are polished to a mirror-like finish and conform to specifications in ANSI/ASTM E617.

These weights are also available with a traceable certificate or a NVLAP calibration certificate (NVLAP Lab Code 105013-0). The traceable certificate is designed for those laboratories and companies that require traceability but do not need to meet any stringent regulatory requirements. The NVLAP certificate provides compliance in both measurement process and data reported to the customer to meet a variety of standards, including NVLAP Handbook 150-2, ISO 9000, ISO/IEC 17025, FDA, GMP, GLP, DOD, ANSI/NCSL Z540-1 and nuclear requirements. One weight set per each.

| Cat. No.         | Mfr. No. | Description  | Qty. |
|------------------|----------|--|------|
| <b>B2187-3</b>   | 7228-4   | 1mg to 100g weight set                                       | 1/ea |
| <b>TR7224-4T</b> | 7224-4T  | 1g to 100g weight set with traceable calibration certificate | 1/ea |

## Metric Precision Weights, ANSI/ASTM Class 1

**TROEMNER - Troemner**  
 Class 1 precision weights are manufactured of high-quality stainless steel and conform to ANSI/ASTM E617 Class I specifications. All weights are supplied with a statement of accuracy that contains both the date of calibration and the class of each weight. Please note that the statement of accuracy does not provide NIST traceability and is not suitable for strict quality or regulatory requirements. This statement verifies that the product has been manufactured to meet all specifications for its class and has been calibrated using standards traceable to NIST.



Class 1 weights 2kg and larger are made of stainless steel. Weights 1g to 1kg are made of Troemner Alloy 8 stainless steel, which possesses low magnetic susceptibility, uniform consistency and high resistance to corrosion. Weights 5 to 500mg are made of stainless steel (30mg weights are made of aluminum). Weights 3mg and smaller are made of aluminum. Weights 1g and larger feature a two-piece construction. The body of the weight is one piece and the knob of the weight is the second piece. The knob has a thread that screws into the body and is tightened. There is a cavity below the knob thread in the body that contains adjusting material, typically of the same material from which the weight is made. Weights 500mg and smaller feature one-piece construction with one side turned up to make them easy to handle with forceps. The corners and edges of these weights are smooth. The nominal value is etched or stamped on the top surface of the weight and their shape is square. All surfaces are polished to a mirror-like finish and conform to specifications in ANSI/ASTM E617. Weights 1mg through 2kg are supplied with a case.

These weights are also available with a traceable calibration certificate or a NVLAP calibration certificate (NVLAP Lab Code 105013-0). The traceable certificate is designed for those laboratories and companies that require traceability but do not need to meet any stringent regulatory requirements. The NVLAP certificate provides compliance in both measurement process and data reported to the customer to meet a variety of standards, including NVLAP Handbook 150-2, ISO 9000, ISO/IEC 17025, FDA, GMP, GLP, DOD, ANSI/NCSL Z540-1 and nuclear requirements.

| Cat. No.        | Mfr. No. | Description  | Qty. |
|-----------------|----------|--------------|------|
| <b>B2170-29</b> | 7037-1   | 1mg weight   | 1/ea |
| <b>B2170-26</b> | 7033-1   | 10mg weight  | 1/ea |
| <b>B2170-23</b> | 7029-1   | 100mg weight | 1/ea |
| <b>B2170-17</b> | 7025-1   | 1g weight    | 1/ea |
| <b>B2170-14</b> | 7021-1   | 10g weight   | 1/ea |
| <b>B2170-12</b> | 7018-1   | 50g weight   | 1/ea |
| <b>TR7016-1</b> | 7016-1   | 200g weight  | 1/ea |

### Weights with NVLAP calibration certificate

|                  |         |              |      |
|------------------|---------|--------------|------|
| <b>TR7033-1W</b> | 7033-1W | 10mg weight  | 1/ea |
| <b>TR7032-1W</b> | 7032-1W | 20mg weight  | 1/ea |
| <b>TR7029-1W</b> | 7029-1W | 100mg weight | 1/ea |
| <b>TR7025-1W</b> | 7025-1W | 1g weight    | 1/ea |
| <b>TR7024-1W</b> | 7024-1W | 2g weight    | 1/ea |
| <b>TR7022-1W</b> | 7022-1W | 5g weight    | 1/ea |
| <b>TR7021-1W</b> | 7021-1W | 10g weight   | 1/ea |
| <b>TR7020-1W</b> | 7020-1W | 20g weight   | 1/ea |
| <b>TR7018-1W</b> | 7018-1W | 50g weight   | 1/ea |
| <b>TR7017-1W</b> | 7017-1W | 100g weight  | 1/ea |
| <b>TR7016-1W</b> | 7016-1W | 200g weight  | 1/ea |
| <b>TR7014-1W</b> | 7014-1W | 500g weight  | 1/ea |

### Weights with traceable calibration certificate

|                  |         |              |      |
|------------------|---------|--------------|------|
| <b>TR7030-1T</b> | 7030-1T | 50mg weight  | 1/ea |
| <b>TR7028-1T</b> | 7028-1T | 200mg weight | 1/ea |
| <b>TR7022-1T</b> | 7022-1T | 5g weight    | 1/ea |

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# Weighing

## Weighing



### Metric Precision Weights, ANSI/ASTM Class 2

TROEMNER - Troemner Class 2 precision weights are manufactured of high-quality stainless steel and conform to ANSI/ASTM E617 Class 2 specifications. All weights are supplied with a statement of accuracy that contains both the date of calibration and the class of each weight. Please note that the statement of accuracy does not provide NIST traceability and is not suitable for strict quality or regulatory requirements. This statement verifies that the product has been manufactured to meet all specifications for its class and has been calibrated using standards traceable to NIST.

Class 2 weights 2kg and larger are made of stainless steel. Weights 1g to 1kg are made of Troemner Alloy 8 stainless steel, which possesses low magnetic susceptibility, uniform consistency and high resistance to corrosion. Weights 5 to 500mg are made of stainless steel (30mg weights are made of aluminum). Weights 3mg and smaller are made of aluminum. Weights 1g and larger feature a two-piece construction. The body of the weight is one piece and the knob of the weight is the second piece. The knob has a thread that screws into the body and is tightened. There is a cavity below the knob thread in the body that contains adjusting material, typically of the same material from which the weight is made. Weights 500mg and smaller feature one-piece construction with one side turned up to make them easy to handle with forceps. The corners and edges of these weights are smooth. The nominal value is etched or stamped on the top surface of the weight and their shape is square. All surfaces are polished to a mirror-like finish and conform to specifications in ANSI/ASTM E617. Weights 1mg through 2kg are supplied with a case.

These weights are also available with a traceable calibration certificate or a NVLAP calibration certificate (NVLAP Lab Code 105013-0). The traceable certificate is designed for those laboratories and companies that require traceability but do not need to meet any stringent regulatory requirements. The NVLAP certificate provides compliance in both measurement process and data reported to the customer to meet a variety of standards, including NVLAP Handbook 150-2, ISO 9000, ISO/IEC 17025, FDA, GMP, GLP, DOD, ANSI/NCSL Z540-1 and nuclear requirements.

| Cat. No.  | Mfr. No. | Description           | Qty. |
|---|----------|-----------------------|------|
| <b>Weights with traceable calibration certificate</b> |          |                       |      |
| TR7037-2T   | 7037-2T  | 1mg weight            | 1/ea |
| TR7026-2T   | 7026-2T  | 500mg weight          | 1/ea |
| TR7022-2T   | 7022-2T  | 5g weight             | 1/ea |
| TR7021-2T   | 7021-2T  | 10g weight            | 1/ea |
| TR7018-2T   | 7018-2T  | 50g weight            | 1/ea |
| TR7017-2T   | 7017-2T  | 100g weight           | 1/ea |
| B2173-22  | 7224-2   | 100g to 1g weight set | 1/ea |



### Metric Precision Weights, ANSI/ASTM Class 4

TROEMNER - Troemner Class 4 precision weights are manufactured of high-quality stainless steel and conform to ANSI/ASTM E617 Class 4 specifications. All weights are supplied with a statement of accuracy that contains both the date of calibration and the class of each weight. Please note that the statement of accuracy does not provide NIST traceability and is not suitable for strict quality or regulatory requirements. This statement verifies that the product has been manufactured to meet all specifications for its class and has been calibrated using standards traceable to NIST.

Class 4 weights 2kg and larger are made of stainless steel. Weights 1g to 1kg are made of Troemner Alloy 8 stainless steel, which possesses low magnetic susceptibility, uniform consistency and high resistance to corrosion. Weights 5 to 500mg are made of stainless steel (30mg weights are made of aluminum). Weights 3mg and smaller are made of aluminum. Weights 1g and larger feature a two-piece construction. The body of the weight is one piece and the knob of the weight is the second piece. The nominal value is etched or stamped on the top surface of the weight and their shape is square. All surfaces are polished to a mirror-like finish and conform to specifications in ANSI/ASTM E617.

These weights are also available with a traceable calibration certificate or a NVLAP calibration certificate (NVLAP Lab Code 105013-0).

| Cat. No.  | Mfr. No. | Description  | Qty. |
|---|----------|--------------|------|
| B2187-4   | 7037-4   | 1mg weight   | 1/ea |
| B2187-7   | 7033-4   | 10mg weight  | 1/ea |
| B2187-13  | 7025-4   | 1g weight    | 1/ea |
| B2187-16  | 7021-4   | 10g weight   | 1/ea |
| B2187-17  | 7020-4   | 20g weight   | 1/ea |
| B2187-18  | 7018-4   | 50g weight   | 1/ea |
| B2187-19  | 7017-4   | 100g weight  | 1/ea |
| TR7016-4  | 7016-4   | 200g weight  | 1/ea |
| TR7014-4  | 7014-4   | 500g weight  | 1/ea |
| <b>Weights with NVLAP calibration certificate</b>     |          |              |      |
| TR7033-4W   | 7033-4W  | 10mg weight  | 1/ea |
| TR7029-4W   | 7029-4W  | 100mg weight | 1/ea |
| TR7028-4W   | 7028-4W  | 200mg weight | 1/ea |
| TR7025-4W   | 7025-4W  | 1g weight    | 1/ea |
| <b>Weights with traceable calibration certificate</b> |          |              |      |
| TR7020-4T   | 7020-4T  | 20g weight   | 1/ea |



## Weighing Metric Test Weight Set, NIST Class F

TROEMNER - Test commercial weighing devices with this cylindrical Class F weight set. Used primarily by state and local weights and measures officials, device installers and service technicians, you can use these weights to test the accuracy of Class III L and IIII scales and most Class III scales. You can also use the weight set to verify scales that have a 0.1% accuracy. Weights are manufactured from grade 303 stainless steel alloy, which offers closely controlled density, low magnetic susceptibility, good stability and resistance to corrosion and handling damage. Weights smaller than 200g, 8 oz. and 0.5 lbs. have a one-piece design.

Supplied with carrying case and either manufacturer's statement of accuracy, traceable certificate or NVLAP weight calibration certificate. (Lab Code 105013-0). Legal for trade (USA)—meets NIST Handbook 105-1 specifications.

| Cat. No.   | Mfr. No.   | Description                                   | Qty. |
|------------|------------|---|------|
| TRTW10010W | TW-100-10W | 10mg - 100g weight set with NVLAP certificate | 1/ea |

## Metric Test Weight, NIST Class F

TROEMNER - Test commercial weighing devices with these Class F weights. Used primarily by state and local weights and measures officials, device installers and service technicians, you can use these weights to test most accuracy Class III scales, all Class III L and IIII scales and scales not marked with a class designation. You can also use the weights to verify scales that have a 0.1% accuracy or lower. The weights are legal for trade, which means their design meets specifications as outlined in National Institute of Standards and Technology (NIST) Handbook 105-1, and they are approved for use on legal for trade devices within the United States.



Weights 200g and larger are made from grade 303 stainless steel alloy that possesses closely controlled density, low magnetic susceptibility, good stability and resistance to corrosion and handling damage. These weights have a two-piece construction.

Weights with a traceable weight certificate are designed for use in organizations that require traceability but do not need to meet any stringent regulatory requirements. The measurement process used for these weights is based on a single standard and utilizes one series of comparisons.

| Cat. No. | Mfr. No. | Description                            | Qty. |
|----------|----------|--|------|
| TR1303T  | 1303T    | 500g weight with traceable certificate | 1/ea |

## UltraClass<sup>SM</sup> Stainless Steel Electronic Balance Calibration Weights

TROEMNER - UltraClass<sup>SM</sup> weights are precise type II weights with weight tolerances 50% greater than ANSI/ASTM E617 Class 1 standards. They combine high precision with two-piece construction for enhanced durability. They have a mirror-like finish and are made of high-quality stainless steel alloy, which offers controlled density, low magnetic susceptibility, good stability and resistance to corrosion and damage. An adjusting cavity allows for adjustment during future calibrations.

Weights are available in a cylindrical design up to 5kg and a stackable grip-handle design from 4 to 30kg. Weights 5kg and below are supplied in protective case. Weight set B2174-21 includes five weights: 100, 200, 300 and 500g and 1kg. All weights are supplied with a statement of accuracy. Traceable certificates and NVLAP certification are also available.

| Cat. No. | Mfr. No. | Description            | Qty. |
|----------|----------|------------------------|------|
| B2174-21 | 8070     | 100g to 1kg weight set | 1/ea |
| B2174-14 | 8038     | 200g weight            | 1/ea |







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