



## About Us

Shankra R&D PVT LTD is a research and manufacturing company primarily focusing of Dairy machinery and its spares. We manufacture milk analyzers and its spare parts which are accurate and reliable for milk collection and its quality control.

We have expanded our reach across PAN India with our products and services. We are team of young professionals with a goal to revolutionalise dairy industry by providing indigenous dairy machinery.

This product brochure will provide you all the information about our products and services.



# REVOLUTIONIZING DAIRY QUALITY CONTROL



## OPINDO COMBO MILK ANALYSER FAST, ACCURATE & RELIABLE

### Key Features

- Rapid Analysis:** Get results in just 30 seconds per sample.
- Comprehensive Measurements:** Analyze fat, protein, lactose, solids-non-fat (SNF), density, added water, salts,
- High Accuracy:** Reliable and precise measurements for all parameters.
- User-Friendly Interface:** Easy-to-read LCD screen with intuitive controls.
- Built-In:** Ultrasonic stirrer
- Data Management:** USB and RS232 connectivity for seamless data transfer.

### Measured Parameters

- Fat:** 0.01% - 15% ( $\pm 0.1\%$  accuracy)
- Protein:** 2% - 7% ( $\pm 0.10\%$  accuracy)
- Lactose:** 0.01% - 6% ( $\pm 0.10\%$  accuracy)
- SNF:** 3% - 12% ( $\pm 0.15\%$  accuracy)
- Density:** 1015 - 1040 kg/m<sup>3</sup> ( $\pm 0.3$  kg/m<sup>3</sup> accuracy)
- Added Water:** 0% - 70% ( $\pm 3\%$  accuracy)
- Freezing Point:** -0.4 to -0.7°C ( $\pm 0.01^\circ\text{C}$  accuracy)
- Salts:** 0.4% - 1.5% ( $\pm 0.05\%$  accuracy)

### General Specifications

- Measurement Time:** ~30 seconds per sample
- Sample Volume:** 15-20 ml
- Power Supply:** 12.8 V 6.8Ah (with 15v 1A charger)
- Dimensions:** 190 x 170 x 140 mm
- Weight:** ~ 4-5 kg

### Applications

- Dairy Farms:** Ensure the quality and composition of milk directly on-site.
- Milk Collection Centers:** Rapid analysis for large volumes of milk.
- Laboratories:** Detailed analysis for research and quality control.

### Benefits

- Efficiency:** Save time with quick and accurate measurements.
- Reliability:** Trusted by dairy professionals across PAN India.
- Support:** Comprehensive customer support and service.

### Why Choose Our Milk Analyzer?

**Innovative Technology:** Cutting-edge solutions for milk quality control.

**User-Centric Design:** Easy to use with minimal training required.

**Cost-Effective:** High-quality analysis at a competitive price.





# OPINDO

## MILK ANALYSER

### FAST, ACCURATE & RELIABLE



## INNOVATIVE TECHNOLOGY FOR MILK QUALITY CONTROL

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- Reliability:** Trusted by dairy professionals across PAN India.
- Support:** Comprehensive customer support and service.

### General Specifications

- Measurement Time:** ~30 seconds per sample
- Sample Volume:** 15-20 ml
- Power Supply:** 12V DC 5A adaptor (battery available)
- Dimensions:** 190 x 170 x 140 mm
- Weight:** ~ 2-3Kg

### Measured Parameters

- Fat:** 0.01% - 15% ( $\pm 0.1\%$  accuracy)
- Protein:** 2% - 7% ( $\pm 0.10\%$  accuracy)
- Lactose:** 0.01% - 6% ( $\pm 0.10\%$  accuracy)
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- Density:** 1015 - 1040 kg/m<sup>3</sup> ( $\pm 0.3 \text{ kg/m}^3$  accuracy)
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# EXPERT PRO PLUS MILK ANALYSER

## FAST, ACCURATE & RELIABLE

### INNOVATIVE TECHNOLOGY FOR MILK QUALITY CONTROL

#### Key Features

- Rapid Analysis:** Get results in just 17 seconds per sample.
- Comprehensive Measurements:** Analyze fat, protein, lactose, solids-non-fat (SNF), density, added water, salts,
- High Accuracy:** Reliable and precise measurements for all parameters.
- User-Friendly Interface:** Easy-to-read LCD screen with intuitive controls.
- Built-In:** Ultrasonic stirrer
- Data Management:** USB and RS232 connectivity for seamless data transfer.

#### Benefits

- Efficiency:** Save time with quick and accurate measurements.
- Reliability:** Trusted by dairy professionals across PAN India.
- Support:** Comprehensive customer support and service.

#### General Specifications

- Measurement Time:** ~17 seconds per sample
- Sample Volume:** 15-20 ml
- Power Supply:** 12V DC 5A adaptor (battery available)
- Dimensions:** 190 x 110 x 140 mm
- Weight:** ~ 2-3Kg

#### Measured Parameters

- Fat:** 0.01% - 15% ( $\pm 0.1\%$  accuracy)
- Protein:** 2% - 7% ( $\pm 0.10\%$  accuracy)
- Lactose:** 0.01% - 6% ( $\pm 0.10\%$  accuracy)
- SNF:** 3% - 12% ( $\pm 0.15\%$  accuracy)
- Density:** 1015 - 1040 kg/m<sup>3</sup> ( $\pm 0.3 \text{ kg/m}^3$  accuracy)
- Added Water:** 0% - 70% ( $\pm 3\%$  accuracy)
- Freezing Point:** -0.4 to -0.7°C ( $\pm 0.01^\circ\text{C}$  accuracy)
- Salts:** 0.4% - 1.5% ( $\pm 0.05\%$  accuracy)

#### Why Choose EXPERT PRO PLUS MILK ANALYSER ?

**Innovative Technology:** Cutting-edge solutions for milk quality control.

**User-Centric Design:** Easy to use with minimal training required.

**Cost-Effective:** High-quality analysis at a competitive price.

# OPTEK DPU

## Reliable Printing Solutions for Industrial and Commercial Applications

Our OPTEK Dot Matrix Printer Unit (DPU) is designed to meet the rigorous demands of industrial and commercial environments. With robust construction and advanced features, it ensures reliable and efficient printing for a variety of applications.



### Key Features

- High-Speed Printing: Prints up to 4 lines per second for quick output.
- Versatile Paper Handling: Supports 58 mm or 76 mm wide roll paper.
- Durable Design: Built to withstand harsh environments with high MTBF and MCBF ratings.
- Multiple Connectivity Options: Serial RS-232C, Parallel (Centronics), USB, and optional Ethernet.
- User-Friendly Interface: Easy setup and operation with intuitive controls.
- Low Power Consumption: Energy-efficient operation with low standby power usage.
- Comprehensive Character Set: Supports alphanumeric, symbols, and special characters.

### Benefits

- Efficiency: Fast and reliable printing for high-demand environments.
- Durability: Long-lasting components reduce downtime and maintenance costs.
- Flexibility: Multiple connectivity options for seamless integration.
- Cost-Effective: Energy-efficient design lowers operational costs.

### Environmental Conditions

- Operating Temperature: 0°C to 45°C
- Operating Humidity: 10% to 80% RH (non-condensing)
- Storage Temperature: -10°C to 60°C
- Storage Humidity: 10% to 90% RH (non-condensing)

### Printing Specifications

- Printing Method: Dot Matrix Impact
- Print Speed: Up to 4 lines per second
- Character Set: Alphanumeric, symbols, and special characters
- Print Width: 42-48 columns (depends on the model)
- Dot Density: 80 dots per line

### Paper Handling

- Paper Type: Roll paper (thermal or plain)
- Paper Width: 58 mm or 76 mm
- Paper Thickness: 0.06 - 0.085 mm
- Roll Diameter: Up to 83 mm

### Interfaces and Connectivity

- Interfaces: Serial RS-232C, USB
- Baud Rate: Selectable baud rates (9600, 1200, 4800)
- Buffer Memory: 2 KB or more

### Power Supply

- Input Voltage: 100-240 V AC, 50/60 Hz
- Power Consumption: Printing: ~2.0 W, Standby: <0.5 W

### Physical Dimensions and Weight

- Dimensions: ~160 x 248 x 143 mm
- Weight: ~1.5 - 2.5 kg

### Reliability and Durability

- MTBF: ~10,000 hours
- MCBF: ~50 million lines
- Print Head Life: ~150 million characters





# Maxtron

## Weighing Scale Precision, Reliability, and Efficiency

### Introducing the Maxtron Weighing Scale

The Maxtron Weighing Scale is engineered to deliver precise and reliable weight measurements across various industrial and commercial applications. With robust construction and advanced features, this scale is ideal for environments where accuracy and durability are paramount.

### Key Features

- High Accuracy: Delivers precise measurements with minimal deviation.
- Robust Construction: Designed to withstand tough industrial conditions.
- Large Platform: Spacious platform to accommodate a wide range of items.
- User-Friendly Interface: Intuitive controls and a clear display for easy operation.
- Multiple Weighing Units: Supports kg and L.
- Tare Function: Allows for net weight determination.
- Overload Protection: Prevents damage to the scale from excessive loads.
- Portability: Models available with built-in handles and wheels for easy transport.

### Benefits

- Efficiency: Fast and reliable measurements increase productivity.
- Durability: Long-lasting components reduce maintenance costs.
- Flexibility: Suitable for various applications with multiple weighing units.
- Cost-Effective: High-quality performance at a competitive price.

### Compliance

Certifications: OIML, NTEP, CE, and ISO certified



### General Specifications

- Maximum Capacity: 200 kg
- Minimum Capacity: 1 kg
- Readability: 50 g
- Accuracy: ±0.05% of the reading

### Platform Specifications

- Platform Size: 500 x 500 mm
- Platform Material: Stainless steel or mild steel with a powder-coated finish
- Design: Low-profile platform with anti-slip surface

### Display

- Type: Digital LED display
- Display Size: 6 digits,
- Backlight: Yes (for LED models)
- Units of Measurement: Kilograms (kg), Litre(L)

### Load Cell

- Type: Strain gauge load cell
- Material: Alloy steel or aluminum
- Overload Protection: Yes, up to 150% of capacity

### Connectivity

- Interfaces: RS232 or USB (optional, for connection to PC or printer)

### Power Supply

- Power Source: Mains power (110/220 V AC, 50/60 Hz)
- Battery: Rechargeable battery (6V/4Ah) for portable use

### Dimensions and Weight

- Scale Dimensions: 400x 400 x 100 mm
- Weight: 10-15 kg



# ULTRASONIC MILK STIRRER

## Revolutionizing Milk Processing with Ultrasonic Technology

### Introducing Ultrasonic Milk Vibrators

The Ultrasonic Milk Vibrators are designed to enhance the efficiency and quality of milk processing. By leveraging advanced ultrasonic technology, these vibrators ensure thorough mixing, homogenization, and emulsification of milk, resulting in superior product quality.

### Key Features

- Ultrasonic Technology: Provides powerful and efficient mixing and homogenization.
- High Precision: Ensures consistent and uniform results.
- Durable Construction: Built to withstand demanding dairy processing environments.
- User-Friendly Design: Simple controls and ergonomic handling for easy operation.
- Versatile Applications: Suitable for various stages of milk processing.
- Variable Intensity Control: Adjustable vibration settings to meet specific processing needs.
- Compact and Portable: Lightweight and easy to integrate into existing systems.

### Benefits

- Enhanced Quality: Achieves uniform and consistent results for superior milk products.
- Efficiency: Reduces processing time and improves productivity.
- Durability: Designed to last in rigorous dairy processing environments.
- Versatility: Suitable for a wide range of milk processing applications.
- Ease of Use: Simple setup and operation with minimal training required.

### General Specifications

- Vibration Frequency: 20 kHz
- Power Output: 300 W
- Intensity Range: 0 to 100%
- Control Type: Manual adjustment

### Construction

- Vibrator Material: Stainless steel.
- Handle Material: Ergonomically designed for comfortable grip
- Shaft Length: 500 mm
- Probe Diameter: 12 mm

### Power Supply

- Input Voltage: 100-240 V AC, 50/60 Hz
- Power Consumption: 350 W
- Cable Length: 2.5 meters

### Physical Dimensions and Weight

- Dimensions: 13cmx 10cm x 25cm
- Weight: 3Kg
- Housing: Durable plastic and stainless steel





# REMOTE DISPLAY

## PRECISION. TRANSPARENCY. EFFICIENCY.

Revolutionize Your Milk Collection Process with Our Remote Display Solutions

### Why Choose a Remote Display for Milk Collection?

- Managing milk collection efficiently is critical for dairy operations. Our Remote Display Solution offers:
- Real-time data visibility.
- Enhanced transparency for farmers and collection centers.
- Seamless integration with existing equipment.

Whether you're a dairy farm, collection center, or cooperative, this system ensures accurate, efficient milk management.

### Key Features

- **Real-Time Display:** Displays milk weight, quality metrics (fat, SNF), and other data instantly. Visible to both operators and farmers.
- **Remote Connectivity:** wired connectivity to update data remotely.
- **Robust Design:** Durable LED/LCD screen with high visibility. Suitable for indoor and outdoor use.
- **Integration Capabilities:** Compatible with milk analyzers, weighing scales

### Technical Specifications

- **Display Type:** LED 7 SEGMENT multi-line display
- **Connectivity:** wired RS232
- **Power Supply:** 110-240V AC
- **Compatibility:** Data Processing Unit
- **Enclosure Material:** Weatherproof, industrial-grade
- **Dimension:** 15 cm x 2cm x 22 cm

### Benefits

- **For Farmers:** Immediate access to collection data. Trustworthy and transparent transactions.
- **For Collection Centers:** Improved operational efficiency. Faster data processing and reduced manual errors.
- **For Dairy Cooperatives:** Better record-keeping and streamlined logistics. Increased farmer satisfaction through transparency.

Empowering Dairy Operations  
with Smart Technology.

