# PURELAB Chorus 2 (RO/DI)

**Type II**

**Liters per day: 10 - 480**

**10 MΩ.cm**

**Key Features**

- ✓ Easy configurability
- ✓ Modular

**Ideally suited for:**

- Stills Replacement
- Buffer Preparation
- pH solution Preparation
- Washing / Rinsing
- Autoclaves
- General Chemistry
- Hydroponics
- Steam Generators
- Sterilizer Feed
- Feed to Type I polishers

## Modular. Flexible. Reliable.

### Reliable delivery of Type II water purity

When Type II water is all you need, then PURELAB Chorus 2 (RO/DI) is the reliable solution with the flexibility to suit your requirements.

Range of storage reservoirs designed to maintain optimum purity of stored purified water in a choice of 15, 30, 60 and 100 liter capacities.


Model shown is PURELAB Chorus 2 with 15l reservoir

### Deionization

The Reverse Osmosis feed contains optimized resin mixes to maximize consumables capacity.

### Simplicity

Simple to install, operate and maintain with a clear indication of water purity.

### Economical

Optional $CO_2$ removal from the purified water (post RO) increasing the life of downstream consumables.

Option to reduce water consumption for low hardness feed waters.

### Modular

Multiple PURELAB Chorus 2 units can feed into one reservoir and systems can be expanded post-installation. As such, the cost of future upgrades is minimized. Duplex systems also guarantee maximum uptime.

(RO)

# PURELAB Chorus 3

**Type III water**

**Liters per day: 10-720**

**RO water**

**Key Features**

- ✓ Easy Configurability
- ✓ Auto rinse
- ✓ Modular

**Ideally suited for:**

- Buffer Preparation
- Washing / Rinsing
- Autoclaves
- General Chemistry
- Hydroponics
- Steam Generators
- Sterilizer Feed
- Feed to Type I polishers

## Modular. Flexible. Reliable.

### Reliable delivery of Type III water purity

When general laboratory grade water is all you need, then PURELAB Chorus 3 is the reliable solution with the flexibility to suit your requirements.

Range of storage reservoirs designed to maintain optimum purity of stored purified water in a choice of 15, 30, 60 and 100 liter capacities.

### Configuration

Ability to configure multiple systems to increase flow rate.

### Simplicity

Simple to install, operate and maintain with a clear indication of water purity.

### Auto Rinse

Maintains purity of water during periods of low use.

### Economical

Optional $CO_2$ removal from the purified water (post RO) increasing the life of downstream consumables.

Option to reduce water consumption for low hardness feed waters.

### Modular

Multiple PURELAB Chorus 3 units can feed into one reservoir and systems can be expanded post-installation. As such, the cost of future upgrades is minimized. Duplex systems also guarantee maximum uptime.


Model shown is PURELAB Chorus 3 with 15l reservoir

## Storage Reservoirs

Our unique range of storage solutions are designed to maintain optimum purity of stored water and provide effective protection against airborne contaminants.

They are designed to accommodate PURELAB Chorus water purification systems by maximizing the space in a single integral, compact unit or to sit independently to suit the layout of your laboratory.

### Multiple positioning

Multiple positioning / mounting options to suit your laboratory layout.

### Polyethylene construction

Inert opaque polyethylene construction with smooth inner surface.

### Dispense tap

Positioned to minimize accidental operation or damage (choice of positions).

### Advanced vent filtration

Prevents the ingress of airborne bacteria, particulates, organic vapours and $CO_2$.

### Auto fill

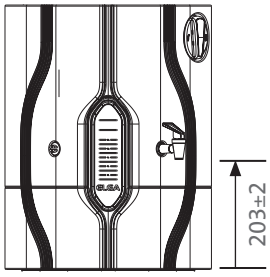
Monitoring of reservoir water levels with automated refill ensures purified water is always available.

### Hygienic Overflow

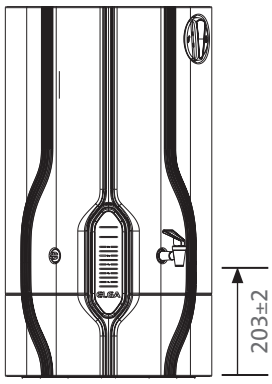
Hygienic overflow in the unlikely event of water system malfunction.

### Easy display

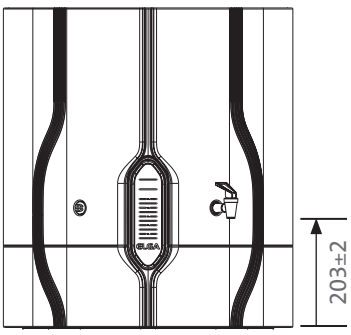
Direct display of stored purified water on the front of the reservoir for easy identification.



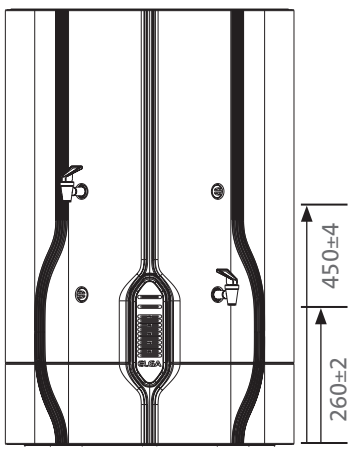

**Capacity:** 15 liters
**Dimensions (mm):**
470 (h) x 376 (w) x 340 (d)
**Flow Rate:** 6 l/min




**Capacity:** 30 liters
**Dimensions (mm):**
660 (h) x 376 (w) x 340 (d)
**Flow Rate:** 8 l/min

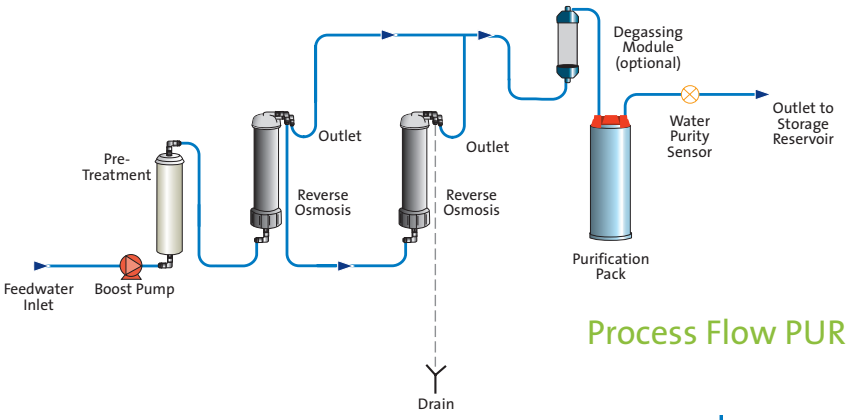



**Capacity:** 60 liters
**Dimensions (mm):**
570 (h) x 532 (w) x 522 (d)
**Flow Rate:** 10 l/min



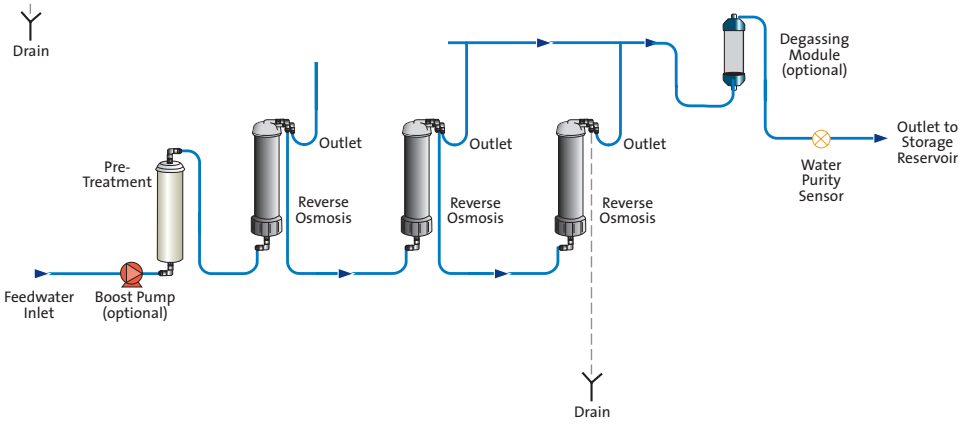

**Capacity:** 100 liters
**Dimensions (mm):**
806 (h) x 532 (w) x 522 (d)
**Flow Rate:** 10 l/min

## Process Flow PURELAB Chorus 2 (RO/DI)




*Quantity of Reverse Osmosis Modules dependent on Chorus Model.*

## Process Flow PURELAB Chorus 3 (RO)




## Specifications

| APPLICATION | PURELAB Chorus 2 (RO/DI) | | PURELAB Chorus 3 (RO) | | |
|---|---|---|---|---|---|
| Nominal output at 15°C | 10 l/hr | 20 l/hr | 10 l/hr | 20 l/hr | 30 l/hr |
| Nominal daily output | 240 l/day | 480 l/day | 240 l/day | 480 l/day | 720 l/day |
| Inorganics @25°C | 1 to >10 MΩ.cm | | >95% rejection | | |
| Organics (MW>200 Dalton) | >99% rejection | | >95% rejection | | |
| Total organic carbon (TOC) | <30 ppb | | <50 ppb | | |
| Bacteria | <5 CFU/ml | | <50 CFU/ml | | |
| pH | Effectively neutral | | Effectively neutral | | |
| Particles | >99% rejection | | >99% rejection | | |
| Purification pack capacity | Liters to 1MΩ.cm = 103,200/(µS/cm + (2.3 x ppm $CO_2$)) | | N/A | | |

**TREATED WATER SPECIFICATIONS**

Standard conditions are 4 bar inlet pressure at 15°C, fed with potable water and a clean pre-treatment cartridge. Refer to flow tables outside these conditions.

| | | | | | |
|---|---|---|---|---|---|
| Source – originally from potable supply, then pretreated | Potable mains water supply | | Potable mains water supply | | |
| Fouling index (max) | 10 | | 10 | | |
| Conductivity | <2000 µS/cm | | <2000 µS/cm | | |
| Free Chlorine | 0.5 ppm max | | 0.5 ppm max | | |
| Heavy Metals (max) | 0.05 ppm | | 0.05 ppm | | |
| Silica | 30 ppm | | 30 ppm | | |
| Temperature | 1-35°C | | 1-35°C | | |
| Flowrate (maximum requirement) | 100 l/hr (27 USG) | | 100 l/hr (27 USG) | | |
| Drain requirements | 80 l/hr (21 USG) | | 80 l/hr (21 USG) | | |
| Feedwater pressure | 2.0 bar (30 psi) maximum; 0.5 bar (7.5 psi) minimum* | | 2.0 bar (30 psi) maximum; 0.5 bar (7.5 psi) minimum* | | |

**FEEDWATER REQUIREMENT**

*Fit LA652 Regulator where feedwater pressure exceeds specified limits

| | | | | | |
|---|---|---|---|---|---|
| Dimensions | Height 435mm, Width 376mm, Depth 340mm | | | | |
| Weight (with boost pump) | 19 kg (42lb) | 20 kg (44 lbs) | 17 kg (37 lbs) | 18 kg (40 lbs) | 19 kg (42lb) |
| Weight | 17 kg (37 lbs) | 18 kg (40 lbs) | 15 kg (33 lbs) | 16 kg (35 lbs) | 17 kg(37 lbs) |