

# PURELAB® Chorus 2 Innovation and Flexibility

Lab Water Purification Solutions for your Research Needs

Type II<sup>+</sup> Water Liters per day: 1 - 120 >15 M $\Omega$ .cm

#### **Key Features**

- ✓ Tap to Type II
- √ Fully re-circulating
- ✓ Integrated filtration
- ✓ Multiple dispensing

#### **Ideally suited for:**

(RO/EDI/UV)

Electrochemistry

Spectrophotometry

- Cell cultures
- Media / buffer preparation

General chemistry

• Feed to ultrapure water

## Flexible. Configurable. Simple.

#### One complete solution for the laboratory

PURELAB Chorus 2+ (RO/EDI/UV) features our patented recirculating EDI technology: the only EDI system on the market that is able to fully recirculate to maintain >15 M $\Omega$ .cm.

The PURELAB Chorus 2<sup>+</sup> provides additional bacteria and inorganic quality for sensitive analytical and life science applications above that of basic laboratory work. With its simple design and ease of use, water can be dispensed from the system or from a choice of additional Halo Dispensers.



## Fully Recirculating EDI

ELGA's patented fully recirculated EDI provides a constant supply of high purity that guarantees a minimum of 15 M $\Omega$ .cm water at all times.

#### Ideal for High Volume Labs

A cost-effective solution for laboratories requiring higher output volumes thanks to the incorporated EDI technology.

## Single System Solution

Perfect single system solution for analytical and life science applications requiring >15 MΩ.cm.

#### Reduced Maintenance Times

Quick and easy replacement of consumables to reduce maintenance times.

## Space Saving Design

Designed to be modular and stackable to save space, whether wall-mounted or under the bench.

## **Data Capture**

Data capture via USB for system performance validation and software updates.

## Halo Dispense Solutions

The modular nature of PURELAB Chorus 2+ means that your dispense solutions sit independently from the unit. You can even have the Halo Dispenser installed in an adjacent laboratory. With Halo Dispenser you have the ultimate flexibility.

## Clear Display

Prioritized information displayed at all times (system status, alarm) for absolute confidence as you dispense.

#### Multiple Positioning

Position the dispenser independent from the water purification system. Optimize your lab space.

#### Flexible Dispensing

- ✓ Variable flow
- ✓ Auto-volume dispense
- ✓ Hands free
- ✓ Locked dispense
- ✓ Hand-held dispensing



Dispenser

Flexible



- ✓ Variable flow rate dispense
- ✓ Drop-by-drop control
- ✓ Locked dispense
  - Purity monitoring to point-of-use
  - Auto volume dispense

PURELAB Chorus 2+

✓ Flexible handset

#### Reservoir Solutions

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.

(RO/EDI/UV)

## Dispense Tap

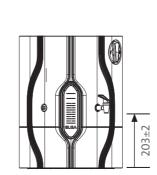
Positioned to minimize accidental operation or damage (choice of positions).

## Advanced vent filtration

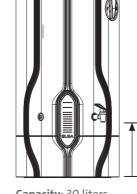
Prevents the ingress of airborne bacteria, particulates, organic vapours and CO<sub>2</sub>.

## Hygienic Overflow

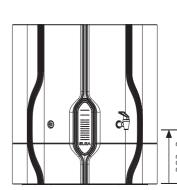
Hygienic overflow in the unlikely event of water system malfunction,



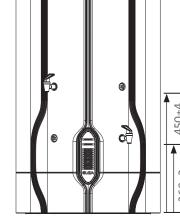
Capacity: 15 liters Dimensions (mm): 470 (h) x 376 (w) x 340 (d) Flow Rate: 6 l/min



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



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



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

APPLICATION	PURELAB Chorus 2* (RO/EDI/UV)		
Nominal output at 15°C	10 l/hr*	20 l/hr*	
Nominal daily output	220 l/day	440 I/day	
Inorganics @25°C	1 to >15 MΩ.cm		
Organics (MW>200 Dalton)	>99% rejection		
Total organic carbon (TOC)	<30 ppb		
Bacteria	<0.1 CFU/ml°		

\* 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. \* With POU filter fitted

Effectively neutral

>99% rejection

Height 679mm, Width 376mm, Depth 353mm

22 kg (49 lbs)

19kg (42 lbs)

SourcePotable mains water supplyFouling index (max)<10Conductivity<1400 μS/cmFree Chlorine0.5 ppm maxHeavy Metals (max)0.05 ppmSilica30 ppmTemperature1-35°CFlowrate (maximum requirement)100 l/hr (27 USG)Drain requirements80 l/hr (21 USG)			
Conductivity  Free Chlorine  0.5 ppm max  Heavy Metals (max)  0.05 ppm  Silica  30 ppm  Temperature  1-35°C  Flowrate (maximum requirement)  100 l/hr (27 USG)	Source	Potable mains water supply	
Free Chlorine  0.5 ppm max  0.05 ppm  Silica  30 ppm  Temperature  1-35°C  Flowrate (maximum requirement)  100 l/hr (27 USG)	Fouling index (max)	<10	
Heavy Metals (max)  Silica  30 ppm  Temperature  1-35°C  Flowrate (maximum requirement)  100 l/hr (27 USG)	Conductivity	<1400 μS/cm	
Silica 30 ppm  Temperature 1-35°C  Flowrate (maximum requirement) 100 l/hr (27 USG)	Free Chlorine	0.5 ppm max	
Temperature 1-35°C  Flowrate (maximum requirement) 100 l/hr (27 USG)	Heavy Metals (max)	0.05 ppm	
Flowrate (maximum requirement)  100 I/hr (27 USG)	Silica	30 ppm	
	Temperature	1-35℃	
Drain requirements 80 l/hr (21 USG)	Flowrate (maximum requirement)	100 l/hr (27 USG)	
	Drain requirements	80 l/hr (21 USG)	
Feedwater pressure 4.0 bar (60 psi) min; 6 bar (90 psi) max*	Feedwater pressure	4.0 bar (60 psi) min; 6 bar (90 psi) max*	
With boost pump: flooded suction (min) to 2.0 bar (30 psi) max		With boost pump: flooded suction (min) to 2.0 bar (30 psi) max	

21 kg (46 lbs)

18 kg (40 lbs)

#### **Key Features**

- ✓ Tap-to-Type II
- √ Fully re-circulating
- ✓ Integrated filtration
- ✓ Multiple dispensing

#### **Ideally suited for:**

 Electrochemistry Spectrophotometry

Feed to ultrapure water

- Media / buffer preparation
- General chemistry

## Flexible. Configurable. Simple.

#### One complete solution for the laboratory

PURELAB Chorus 2<sup>+</sup> (RO/DI/UV) provides tap to 15 MΩ.cm pure water for laboratories requiring up to 100 liters per day and is able to fully recirculate to maintain 15 M $\Omega$ .cm.

The PURELAB Chorus 2+ provides additional bacteria and inorganic quality for sensitive analytical and life science applications above that of basic laboratory work. With its simple design and ease of use, water can be dispensed from the system or from a choice of additional Halo Dispensers.

#### **Fully Recirculating**

Type II⁺ water

>15 MΩ.cm

Liters per day: 1 - 100

In addition to simple composite vent filtration, the PURELAB Chorus 2<sup>+</sup> is the only fully recirculating Type II<sup>+</sup> pure water system on the market, maintaining consistent peak water purity at 15MΩ.cm.

## Configuration

Ability to configure multiple systems to increase flow rate and save space through stackable solutions that can be wall mounted, on or under the bench.

## Simplicity

Simple to install, operate and maintain, with a clear indication of water purity. It is also simple to replace consumables, reducing maintenance time.

## Data Capture

Data capture via USB for system performance validation and software updates.

## Dispense

Choose from three different Halo Dispense solutions to allow additional dispense points, even in adjacent labs.



рΗ

Dimensions

Weight

Weight (with boost pump)

\*Fit LA652 Regulator where feedwater pressure exceeds specified limits

## Halo Dispense Solutions

The modular nature of PURELAB Chorus 2<sup>+</sup> means that your dispense solutions sit independently from the unit. You can even have the Halo Dispenser installed in an adjacent laboratory. With Halo Dispenser you have the ultimate flexibility.

#### Clear Display

Prioritized information displayed at all times (system status, alarm) for absolute confidence as you dispense.

#### Multiple Positioning

Position the dispenser independent from the water purification system. Optimize your lab space.

#### Flexible Dispensing

- ✓ Variable flow
- ✓ Auto-volume dispense
- ✓ Hands free
- ✓ Locked dispense
- ✓ Hand-held dispensing



- ✓ Variable flow rate dispense
- ✓ Drop-by-drop control
- ✓ Locked dispense
  - Purity monitoring to point-of-use
  - Auto volume dispense

✓ Flexible handset

## Reservoir Solutions

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.

## Dispense Tap

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

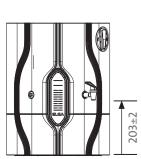
## Advanced vent filtration

(RO/DI/UV)

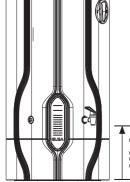
Prevents the ingress of airborne bacteria, particulates, organic vapours and CO<sub>3</sub>.

## Hygienic Overflow

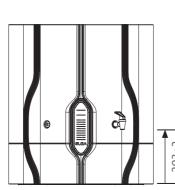
Hygienic overflow in the unlikely event of water system malfunction



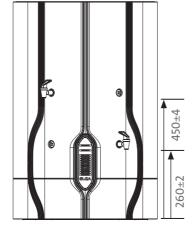
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Capacity: 30 liters Dimensions (mm): 660 (h) x 376 (w) x 340 (d) Flow Rate: 8 I/min

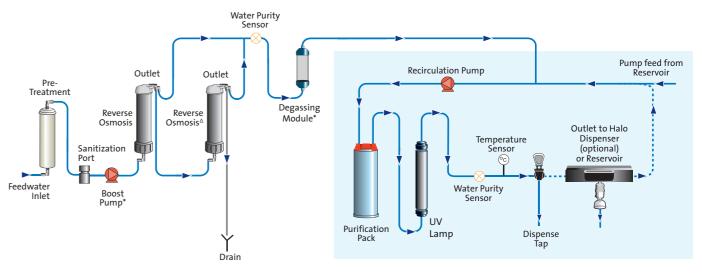


Capacity: 60 liters Dimensions (mm): 570 (h) x 532 (w) x 522 (d) Flow Rate: 10 I/min



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

#### Process Flow PURELAB Chorus 2<sup>+</sup> (RO/DI/UV)



<sup>&</sup>lt;sup>△</sup> second RO module for the 20I variant only

Specifications		
APPLICATION	PURELAB Chorus 2+ (RO/DI/UV)	
Nominal output at 15°C	10 l/hr*	20 l/hr*
Nominal daily output	240 I/day	480 l/day
Inorganics @25°C	1 to >15 MΩ.cm	
Organics (MW>200 Dalton)	>99% rejection	
Total organic carbon (TOC)	<30 ppb	
Bacteria	<0.1 CFU/ml°	
рН	Effectively neutral	
Particles	>99% rejection	
Purification pack capacity	Liters to 15 MΩ.cm = 74,700/(μS/cm + (2.3 x ppm CO <sub>2</sub> ))	

\* 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 & With POLL filter fitted

Source	Potable mains water supply	
Fouling index (max)	<10	
Conductivity	<2000 μS/cm	
Free Chlorine	0.5 ppm max	
Heavy Metals (max)	0.05 ppm	
Silica	30 ppm	
Temperature	1-35°C 100 l/hr (27 USG) 80 l/hr (21 USG) 4.0 bar (60 psi) min; 6 bar (90 psi) max*	
Flowrate (maximum requirement)		
Drain requirements		
Feedwater pressure		
	With boost pump: flooded suction (min) to 2.0 bar (30 psi) max	

*Fit LA652 Regulator where feedwater pressure exceeds specified limits			
Dimensions	Height 679mm, Width 376mm, Depth 353mm		
Weight (with boost pump)	17 kg (37 lbs)	18 kg (40 lbs)	
Weight	15 kg (33 lbs)	16kg (35 lbs)	

# PURELAB Chorus 2

(RO/DI)

Type II Liters per day: 10 - 480 10 MΩ.cm

#### **Key Features**

- ✓ Easy configurability
- ✓ Modular

#### Ideally suited for:

- General Chemistry Stills Replacement
- Buffer Preparation
- pH solution Preparation
   Steam Generators
- Washing / Rinsing
- Sterilizer Feed

Hydroponics

- Autoclaves
- 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.



#### 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, 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.

Model shown is PURELAB Chorus 2 with 15l reservoir

# The LabWater Specialists

ELGA is an integral part of Veolia, the global leader in optimized resource management. Veolia has a worldwide team of over 200,000 people and is renowned for its capabilities in providing water, waste and energy management solutions that contribute to the sustainable development of

The ELGA team focuses exclusively on water and its purification. It continually contributes to the unique technical and scientific applications and expertise developed for over 75 years. We are experienced in meeting the challenges that arise during the development, installation and servicing of single point-of-use water purification systems as well as large projects involving consultation with architects, consultants and clients.

# Commitment to Sustainability

The ELGA products are designed to have the lowest possible impact on the environment at all stages: manufacture, in service and at end of life.

We can calculate the carbon value of all our products throughout their lifetime and we make this information available to our customers and partners.

Visit: www.elgalabwater.com/sc for more details.

#### Contact us:

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