

# PURELAB® Chorus 1 Innovation and Flexibility

Lab Water Purification Solutions for your Research Needs

Life Science | Analytical Science | Genetic Science

## PURELAB Chorus 1

Type I<sup>+</sup> Water Liters per day: 1 - 120 18.2 MΩ.cmFlexible.

Configurable.

#### **Key Features**

- ✓ Real-time TOC
- ✓ Fully re-circulating
- ✓ Integrated filtration
- ✓ Multiple dispensing

#### Ideally suited for:

- Mass Spectrometry
- Molecular biology
- Ultra trace analyses
- Electrochemistry
- Atomic Spectroscopy
  - Liquid Chromatography
- Ion Chromatography
- Cell cultures

Life Science | Analytical Science | Genetic Science

- Qualitative Analyses
- Gas Chromatography
- Immunochemistry

## Simple.

Delivering the ultimate in water purity for absolute confidence in your results Advanced PureSure Deionization

Fully Recirculating

Real-time TOC Monitoring



Model shown is PURELAB Chorus 1 with Advanced Halo Dispense

**Integrated Filtration** Full Spectrum UV Treatment Data Capture

## Halo Dispense Solutions



#### Flexible Dispensing

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

#### Multiple Positioning

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

## Real-Time TOC monitoring

Water purity is monitored right up to the point of use for complete peace of mind with real-time TOC monitoring for critical applications.



#### Halo Glow

The unique glow changes colour and flashes alerting you to changes in system performance.

## Clear Display

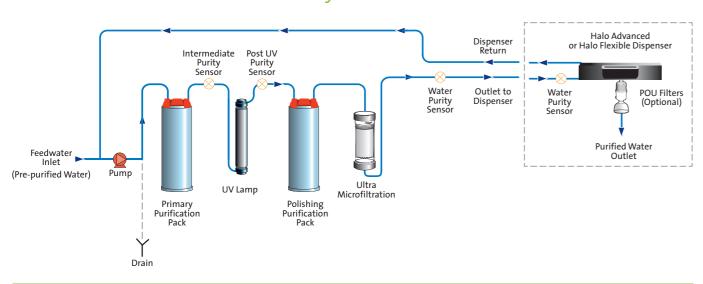
Prioritized information displayed at all times (system status, TOC, alarm) for absolute confidence as you dispense.





✓ Flexible handset

## **Process Flow PURELAB Chorus 1 Analytic**



ADDITION	LIFE COLENCE	ANIAIVTICAL DECEADOU	CENEDAL COLENCE
APPLICATION	LIFE SCIENCE	ANALYTICAL RESEARCH	GENERAL SCIENCE
Dispense Flowrate	Up to 2.0 l/min <sup>†</sup>	Up to 2.0 l/min <sup>†</sup>	Up to 2.0 l/min <sup>†</sup>
Inorganics @25°C	18.2 MΩ.cm	18.2 MΩ.cm	18.2 MΩ.cm
Total organic carbon (TOC)	1-3 ppb*	1-3 ppb*	3-10 ppb*
Bacteria	<0.1 CFU/ml°	<0.1 CFU/mI <sup>◊</sup>	<0.1 CFU/ml <sup>◊</sup>
Bacterial Endotoxin	<0.001 EU/ml	<0.001 EU/ml <sup>◊</sup>	<0.001 EU/ml <sup>◊</sup>
рН	Effectively neutral	Effectively neutral	Effectively neutral
Particles	<0.01 μm	<0.05 μm	0.2 μm <sup>◊</sup>
RNase	<0.002 ng/ml	<0.002 ng/ml <sup>◊</sup>	<0.002 ng/ml°
DNase	<20 pg/ml	<20 pg/ml <sup>◊</sup>	<20 pg/ml°
Purification pack capacity	Liters to 18.2 M $\Omega$ .cm = 94,100/( $\mu$ S/cm + (2.3 x ppm CO <sub>2</sub> ))		
* Dependant on feed water – recommended t	feed <50 ppb TOC ◇ With POU filter	fitted †When connected to Halo, Ad	lvanced or flexible
Source – originally from potable supply, then pretreated	Preferably RO produced by PURELAB Chorus 3 or filtered service deionization (SDI) or distilled. Note: mixed bed or twin bed deionized supplies should be cation limited at exhaustion		
Fouling index (max)	1 for all models. A 5-10 micron membrane prefilter is recommended for all non-RO feeds		
Service deionization (SDI) – $M\Omega$ .cm	1 MΩ.cm minimum resistivity at exhaustion		
Reverse Osmosis (RO) – μS/cm	Recommended <30 μS/cm		
Free Chlorine	0.05 ppm max		
тос	<50 ppb max (RO feed)		
Carbon dioxide	30 ppm (max recommended)		
Silica	2 ppm (max recommended)		
Particulates	Filtration down to 5-10 micron advisable to protect internal and/or point of use filters		
Temperature	1-35°C (Recommend 10-15°C)		
Flowrate (maximum requirement)	130 l/hr (34 USG)		
Drain requirements	Up to 2 I/min (0.5 USG)		
Feedwater pressure	0.7 bar (10 psi) maximum; 0.07 bar (1 psi) minimum		
* Fit LA652 Pressure Regulator where feedwat	er pressure exceeds specified limits		

19 kg (42 lbs)

#### **Key Features**

Liters per day: 1 - 100

18.2 MΩ.cm

Type I Water

## ✓ Tap-to-ultrapure

- v Tap to untrapure
- ✓ Fully re-circulating
- ✓ Integrated filtration
- ✓ Multiple dispensing

#### Ideally suited for:

- Mass Spectrometry
- Molecular biology
- Electrochemistry
- Atomic Spectroscopy
- Liquid Chromatography
- Gas Chromatography
- Immunochemistry
- General laboratory
- Spectrophotometry

## Flexible. Configurable. Simple.

## One complete solution for the laboratory

PURELAB Chorus 1 Complete provides a complete solution from tap to ultrapure water direct from a potable water supply, and is ideal for laboratories needing up to 100 liters of 18.2 M $\Omega$ .cm ultrapure water. With its simple and ergonomic design and ease-of-use, water can be dispensed directly from the system or from a choice of additional Halo Dispensers.

#### **Fully Recirculating**

Recirculation of purified water through our modular reservoir to maintain consistent peak water purity at 18.2 M $\Omega$ .cm.

#### ELGA Biofilter (optional)

When fitted, PURELAB Chorus 1 Complete produces water which is free from biologically active impurities.

## Single System Solution

Perfect single system solution for analytical and life science applications requiring 18.2 M $\Omega$ .cm.

## Easy Access

Front entry service doors provide quick and easy access to consumables.

## Space Saving Design

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

## Data Capture

18 kg (40 lbs)

19 kg (42 lbs)

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



## Halo Dispense Solutions

The modular nature of PURELAB Chorus 1 Complete 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



- ✓ 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

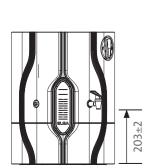
Positioned to minimize accidental operation or damage (choice of positions).

## Advanced vent filtration

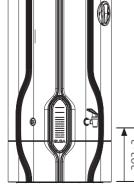
Prevents the ingress of airborne bacteria, particulates, organic vapours and CO<sub>2</sub>.

## Hygienic Overflow

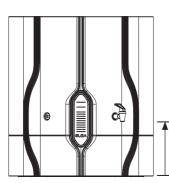
Hygienic overflow in the unlikely event of water system malfunction,



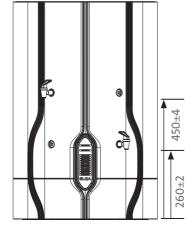
Capacity: 15 liters Dimensions (mm): 470 (h) x 376 (w) x 340 (d) Flow Rate: 6 l/min



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

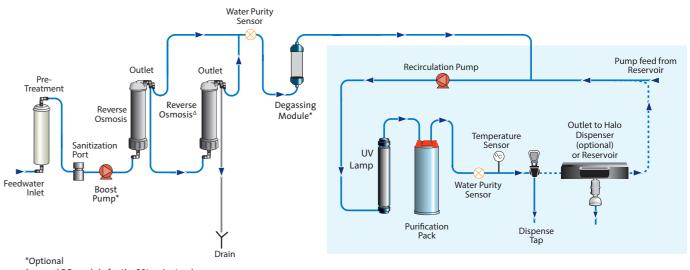


Capacity: 60 liters Dimensions (mm): 570 (h) x 532 (w) x 522 (d) Flow Rate: 10 I/min



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

#### Process Flow PURELAB Chorus 1 Complete



Specifications				
APPLICATION	PURELAB Chorus Complete			
Nominal output at 15°C	10 l/hr	20 l/hr		
Dispense Flowrate	>1.5 l/min	>1.5 l/min		
Inorganics @25°C	18.2 MΩ.cm	18.2 MΩ.cm		
Total organic carbon (TOC)	<10 ppb	<10 ppb		
Bacteria	<0.1 CFU/ml°	<0.1 CFU/ml <sup>◊</sup>		
Bacterial Endotoxin	<0.001 EU/ml°	<0.001 EU/ml°		
рН	Effectively neutral	Effectively neutral		
Particles	0.2 μm°	0.2μm <sup>◊</sup>		
RNase	<0.002 ng/ml°	<0.002 ng/ml◊		
DNase	<20 pg/ml°	<20 pg/ml°		
Purification pack capacity	Liters to 18.2 MΩ.cm = 94,100/( $\mu$ S/cm + (2.3 x ppm CO <sub>2</sub> ))			
♦ With POU filter fitted				
Source	Potable mains water supply			
Fouling index (max)	<10			
Free Chlorine	0.5 ppm max			
Carbon dioxide	Ideally <20 ppm			
Silica	30 ppm (max recommended)			
Temperature	1-35°C (Recommend 10-15°C)			
Flowrate (maximum requirement)	130 l/hr (34 USG)			
Drain requirements	Up to 2 I/min (0.5 USG)			
Feedwater pressure	4.0 bar (60 psi) min; 6	4.0 bar (60 psi) min; 6 bar (90 psi) max*		
	With boost pump: flooded suction	With boost pump: flooded suction (min) to 2.0 bar (30 psi) max		

Fit LA652 Pressure Regulator where feedwater pressure exceeds specified limits

Dimensions	Height 679mm, Width 376mm, Depth 353mm		
Weight (with boost pump)	17 kg (38 lbs)	18 kg (40 lbs)	
Weight	15 kg (33 lbs)	16 kg (36 lbs)	

# 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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