The PURELAB® Range
UNINTERRUPTED DISCOVERY
The laboratory water purification solutions for your research needs.
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Elga. We are the LabWater Specialists

We are the specialists in the engineering, service & support of water purification systems. Our unrivalled product design has achieved international recognition and awards. We have been working with scientists since 1937 to guarantee ultrapure and pure water for their experiments and laboratory work.

Why choose Elga as your laboratory water partners?

Customer-focused – what we create is for our customer
Our commitment to developing and providing you with ultrapure water means that you can focus and concentrate on obtaining accurate and reliable results.

Innovative – the keystone of our thinking
Our UK R&D facilities are always looking to provide products dedicated to supplying you with the right water quality for your application.

Sustainable – at the forefront of all of our activities
Our 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 through their lifetime.

British Engineering and Manufacturing – the standard for all our products
All our systems are manufactured in the UK and we are accredited to ISO:9001 and ISO:14001 standards.

Our technical service teams support our global science & healthcare customers with specialist expertise. Global digital performance monitoring ensures laboratory work is uninterrupted, and a global supply chain supports clients from regional centres on every continent.

Our Awards

Good Design Award 2021
DBA Design Effectiveness Award Winner
Red Dot Design Award Winner 2011
The choice you need, for your lab

We understand how important it is for you to obtain a choice of water qualities that range from Reverse Osmosis grade for simple routine washing and rinsing, through to ultrapure water for the most critical applications. The PURELAB product range has a wide variety of water purification systems that will meet any one of your requirements for water quality.

What are the different types of water quality and what are they used for?

Type I Water
Often referred to as ultrapure water, this grade is required for some of the most water-critical applications such as HPLC (High-Performance Liquid Chromatography) mobile phase preparation, blanks and sample dilution for other key analytical techniques such as GC (Gas Chromatography), AAS (Atomic Absorption Spectrophotometry), and ICP-MS (inductively Coupled Plasma Mass Spectrometry) as well as molecular biology applications.

Type II Water
Is the grade for general laboratory applications such as media preparation, pH solutions, buffers and used as a feed source to Type I systems.

Type III Water
Is the grade of water recommended for non-critical work which may include glassware rinsing, water baths, autoclave, environmental chambers as used to feed Type I systems.

There is a PURELAB® product to suit your specific needs

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*PureSure Technology/in-line filtration/variety of purification packs. **Dependent on feed water.

Our comprehensive range of products

Chorus 1
Chorus 1 Complete
Chorus 2
Chorus 3
Quest
Chorus 2+
Pharma Compliance
Ion Exchange

Ion exchange resins are often used as part of a final treatment step. Single-use purification packs typically use a mixture of ion-exchange resins and other media. When used to deionize water, charged impurities are retained on these resins, while H+ and OH- ions (which combine to form water) are released to replace them. This is a highly efficient process and can remove ions to give product-water resistivity of up to 18.2 MΩ.cm.

Technologies

The various technologies used in ELGA equipment are able to remove impurities from water down to extremely low levels; some technologies focus on specific contaminants while others have a broader spectrum of targets. To achieve the correct water purity for a particular application, in a cost effective manner, technologies must be arranged in combination and their operation optimized.

Activated Carbon

Contains a maze of tiny pores with sizes ranging from <0.1 – 2.9 nm and a surface area of about 1000 square meters per gram. The nature of this surface allows adsorption of organic impurities from the water and catalytic decomposition of free chlorine and, more slowly, chloramines.

It is applied in:
- Pre-treatment cartridges
- Composite vent filters
- Final purification cartridges

Microporous Depth Filters

Pre-filtration using microporous depth filters, provides an entrapment/adsorption barrier for the removal of large suspended particles and some colloids from the water entering the ELGA purification process. Typically rated at 5 – 10µm and combined with an activated carbon treatment, these filters act to protect subsequent RO systems from fouling and blockage.

Reverse Osmosis

Reverse osmosis (RO) is a process where pressure is used to push water through a membrane filter in a cross-flow fashion. RO membranes are extremely fine filters that reject water contaminants less than 1nm in diameter. Typically >95% of ionic impurity, most organic impurity, and nearly all particulates, bacteria and bio-molecules are removed from the permeate water; these are carried out of the RO module in a waste or concentrate water stream.

Elec trodeionization

Electrodeionization (EDI) combines ion-exchange resins and ion-selective membranes, which are used to move ionic impurities into a waste or concentrate water stream leaving purified product-water. As impurities leave via the concentrate water stream, their build-up does not exhaust the resin, and therefore prolongs resin lifespan. A single EDI unit may operate for many years before a replacement is required. Typically product water resistivity of >10 MΩ.cm is consistently achieved using this process. This technology can be used as an alternative to single-use purification cartridges.

Ultraviolet (UV) Light

Treatment of water with UV-C light is used to photo-oxidise organic impurities and/or inactivate micro-organisms. Photo-oxidation of organic impurities results in polar or charged species that can subsequently be removed by ion-exchange processes. Typically the UV lamp forms part of a ‘polishing’ treatment loop including ion-exchange, through which water is repeatedly circulated to maintain quality. Water with Total Organic Carbon (TOC) of <5 ppbC and bacteria at <1 CFU/ml can be achieved in ELGA products that use this approach.

Sub-micron Filtration

Sub-micron filtration, including micro, ultra-micro and ultra filters (30–3000 nm) are used as part of a ‘polishing’ loop or at the point-of-use. Fine filtration is applied to remove bacteria (live or dead) and biologically active molecules. These absolute filters have pores smaller than their intended target and can retain the impurity while allowing water to pass through. Impurities that are removed by sub-micron filtration, include bacteria, colloids, enzymes, endotoxins and particulates.
PURELAB®
Product Range

WWW.ELGALABWATER.COM

PRODUCT OVERVIEW
PURELAB®

Quest

The only purifier on the market that dispenses all 3 types of science ready water from a compact, economical and easy to use system. The Quest water solution system provides laboratory water directly from a tap water input.

Overview:
- Type I - 18.2 MΩ.cm
  (Up to 10 Litres per day)
- Type II - > 1 MΩ.cm
  (Up to 10 Litres per day)
- Type III - 20 µS.cm
  (Up to 30 Litres per day)

Key Features:
- Compact
- Connected
- Sustainable
- Cost effective
- Proven reliability which is tested, proven and unrivalled
- Effortless, ingenious, intuitive

Ideal Applications:
- Type I Water
  HPLC
  GC-MS
  AA/ICP-OES
  IC
- Type II Water
  Preparing and diluting buffers and reagents
  Tissue culture media
  pH solutions
- Type II Water
  Glassware rinsing
  Water baths
- Type III Water
  Molecular biology e.g.
  DNA Sequencing
  and PCR

Cost-Effective
3 types of water from one system. Space saving design means a more efficient lab and team.

Compact
232 mm wide. 510 mm high. Wall mountable; saving valuable lab space.

Sustainable
Made from more than 85% reclaimed materials.* Designed with long lasting consumables.

Effortless, ingenious, intuitive

*Excludes materials in contact with the purification process.

See specification on page 40

3 types of water from one system. Space saving design means a more efficient lab and team.
Simplicity and Elegance
The best dispenser for your distribution system.
The PURELAB flex 1 is designed as a dispensing and monitoring system when connected to a reservoir or distribution loop. It also works as a simple deionization system.

**Overview:**
- Type I
- Type II
- Type III
  Dependant on use of DI pack
  Litres per day: Dependant on feed water

**Key Features:**
- Flexible dispensing
- Customise settings
- Full re-circulating
- Integrated filtration

**Ideal Applications:**
- General Lab
- Type II Applications
- Dispensing with DI Pack

**Customized Settings**
Be in control of your PURELAB flex by customizing the settings to suit your application.

**Simplicity**
Simple to install, operate and maintain with prioritized information displayed at all times (system status, alarm) for absolute confidence as you dispense.

**Easy to Use**
Ergonomic design with features including auto volumetric dispense and height adjustability.

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

**Space Saving**
Space saving and compact dispenser which can be placed on the bench or wall mounted.

See specification on page 42
**PURELAB® flex 3**

**Power and flexibility**
A small unit with big power capabilities.
The PURELAB flex 3 is the ultimate system providing Type 1 ultrapure water from potable tap water in one single unit.

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**Overview:**
- Type I - 18.2 MΩ.cm
- Litres per day: < 10

**Key Features:**
- Real-time TOC
- Fully re-circulating
- Integrated filtration
- Adjustable dispensing

**Ideal Applications:**
- Mass Spectrometry
- Molecular Biology
- Electrochemistry
- Atomic Spectroscopy
- Liquid Chromatography
- Gas Chromatography
- Immunochemistry
- Spectrophotometry
- Media / Buffer Prep
- General Chemistry
- Cell Culture

**Ideal Applications:**
- Mass Spectrometry
- Molecular Biology
- Electrochemistry
- Atomic Spectroscopy
- Liquid Chromatography
- Gas Chromatography
- Immunochemistry
- Spectrophotometry
- Media / Buffer Prep
- General Chemistry

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**Space Saving Design**
The compact unit can be placed on the bench or wall mounted and has an integrated 7 Ltr reservoir filled by a 10 L/hr RO membrane, ensuring that water is always available.

**Real-time TOC Monitoring**
Provides complete confidence in organic purity and clear display at all times. The final quality sensor is placed at the entry of the flexible dispenser giving you peace of mind.

**Full Recirculating**
Ensuring the highest microbial purity and guaranteeing pure water, as recirculation of the water occurs from the reservoir right to the point-of-use.

**Flexible Dispenser**
The intuitive dispenser offers a clear display of the water purity for absolute confidence as you dispense.

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**Easy to Maintain**
Easy access to the consumables as well as quick easy automated sanitization to minimize downtime.

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

**Space Saving**
Space saving and compact dispenser which can be placed on the bench or wall mounted.

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See specification on page 43
**PURELAB® flex 4**

Flexible elegance
An independent system. PURELAB flex 4 produces ultrapure (Type I) water from pre-purified water, with its manual-filling capability, it is able to operate independently from a fixed water source in temporary locations. It has an integrated 7 Litre reservoir, ensuring that water is always available and is particularly suited for small volumes of water where TOC levels are critical and must remain stable.

**Overview:**
- Type I - 18.2 MΩ·cm
- Litres per day: Dependant on feed water

**Key Features:**
- Real-time TOC
- Fully re-circulating
- Customize settings
- Integrated filtration
- Adjustable dispensing

**Ideal Applications:**
- Mass Spectrometry
- Molecular Biology
- Electrochemistry
- Atomic Spectroscopy
- Liquid Chromatography
- Gas Chromatography
- Immunochemistry
- Spectrophotometry
- Media / Buffer Prep
- General Chemistry

**Space Saving Design**
The compact unit can be placed on the bench or can be wall mounted and has an integrated 7 Litre reservoir, ensuring that water is always available.

**Full Recirculating**
Ensuring the highest microbial purity and guaranteeing pure water, as recirculation of the water occurs from the reservoir right to the point-of-use.

**Flexible Dispenser**
The intuitive dispenser offers a clear display of the water purity for absolute confidence as you dispense.

**Real-time TOC Monitoring**
Provides complete confidence in organic purity and clear display at all times.

**Simplicity**
Simple to install, operate and with a quick semi-automated sanitization to minimize downtime.

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

**Portable System**
Access on the top of the system gives the option to fill the reservoir with pre-purified water. This means that it can be moved at any time as the lab environment evolves.

See specification on page 43

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**PURELAB® flex 5 & 6**

Unique automated solution.
The PURELAB flex 5 & 6 is a unique automated solution. It provides Type I (ultrapure water) from potable water (flex 5) or RO and is designed to couple directly with analytical chemistry systems delivering complete automation - all in one single unit.

**Overview:**
- Type I - 18.2 MΩ·cm
- Litres per day: <10

**Key Features:**
- Connects directly to multiple analytical chemistry systems from multiple brands
- On-demand continuous ultrapure water to analysers
- Full automation of water production & delivery
- Real-time TOC monitoring
- Full re-circulating
- Adjustable dispensing

**Ideal Applications:**
- Analytical Chemistry systems
- Mass Spectrometry
- Molecular Biology
- Electrochemistry
- Atomic Spectroscopy
- Liquid Chromatography
- Cell Culture
- Gas Chromatography
- Immunochemistry
- Spectrophotometry

**On-demand Water Supply**
Provides consistent & continuous supply of ultrapure water to analysers to reduce failed runs and loss of samples, reagents and analyser components/accessories.

**Space Saving Design**
The compact unit can be placed on the bench or can be wall mounted and has an integrated 7 Litre reservoir filled by a 10 l/hr RO membrane, ensuring that water is always available.

**Full Recirculating**
Ensuring the highest microbial purity and guaranteeing pure water, as recirculation of the water occurs from the reservoir right to the point-of-use.

See specification on page 44
The Chorus Range

Chorus 1

Chorus 1 Complete

Pharma Compliance

Chorus 2

Chorus 2+

Chorus 3

WWW.ELGALABWATER.COM CHORUS FAMILY
Delivering the ultimate in water purity for absolute confidence in your results. When you require the ultimate in water purity, PURELAB Chorus 1 provides the perfect solution. Consistently delivering water purity of 18.2 MΩ.cm (Type I+/I) and underpinned by the advanced PureSure® deionization system.

Overview:
- Type I+ Water - 18.2 MΩ.cm
- Litres per day: Depends on feedwater

Key Features:
- Real time TOC
- Fully re-circulating
- Integrated filtration
- Multiple dispensing
- PureSure technology

Ideal Applications:
- Mass Spectrometry
- Ion Chromatography
- Ultra trace Analyses
- Qualitative Analyses
- Gas Chromatography
- Molecular Biology
- Cell Cultures
- Electrochemistry
- Immunochemistry
- Atomic Spectroscopy

Advanced PureSure Deionization
A twin-bed ion-exchange process with inter-stage resistivity monitoring allows retention of any impurity released during exhaustion of a primary cartridge, by the secondary polishing cartridge. This method gives guaranteed, optimum, product-water quality, advanced warning of consumable change, and extended consumable service life.

Fully Recirculating
Ensuring microbial purity and guaranteeing pure water at the point-of-use.

Real-time TOC Monitoring
Provides complete confidence in organic purity.

Integrated Filtration
Ultrafiltration or microfiltration filters out endotoxins, proteins, nucleases and particulates. 185nm wavelength breaks organic compounds and 254nm wavelength sterilises bacteria and viruses.

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

Chorus 1 enables you to focus on attaining accurate results while ensuring an uninterrupted work flow.
One complete solution for the laboratory.

PURELAB Chorus 1 Complete provides a complete solution from potable tap water supply to ultrapure water, and is ideal for laboratories needing up to 480 Litres of 18.2 MΩ.cm ultrapure water. With its easy to use ergonomic design, water can be measured and dispensed with confidence directly from the system or from a choice of additional Halo Dispensers.

Overview:
- Type I Water - 18.2 MΩ.cm
- Litres per day: Up to 480

Key Features:
- Tap-to-ultrapure
- Fully re-circulating
- Integrated filtration
- Multiple dispensing

Ideal Applications:
- Mass Spectrometry
- Molecular Biology
- Electrochemistry
- Atomic Spectroscopy
- Liquid Chromatography
- Gas Chromatography
- Immunochemistry
- General Laboratory
- Spectrophotometry

Fully Recirculating
Recirculation of purified water through our modular reservoir to maintain consistent peak water purity at 18.2 MΩ.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 MΩ.cm.

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

Reduced Maintenance Times
Quick and easy replacement of consumables as well as semi-automated sanitization to reduce maintenance times.

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

Economical
Optional CO2 removal from the purified water (post RO) increasing the life of downstream consumables.

Chorus 1 Complete provides a complete solution from potable tap water supply to ultrapure water.

See specification on page 45
PURELAB®
Pharma Compliance

PURELAB Pharma Compliance is packed with innovative features optimised for QC laboratories. It offers all the necessary purification, software capabilities, qualification documentation and online support services necessary for the validation required to meet Good Manufacturing Practice (GMP). The ultrapure water system meets your laboratories needs, with minimal intervention, improved efficiencies and a contemporary style to compliment any modern laboratory.

The Pharma Compliance includes secure software providing the evidence to meet FDA and EU standards for digital record keeping. Purification processes fulfil United States Pharmacopeia standards 643 and 645. Qualification documents provided enable the unit to support labs subject to validation under GxP.

Key Features:
- Type I Water - 18.2 MΩ.cm
- Smart, intuitive software
- Digital record keeping
- Quality management system
- Meets GMP requirements
- Meets the TOC verification and water conductivity measurements required under US pharmacopeia 643 and 645.

Overview:
- QC labs wanting to meet high level GMP regulations
- QC labs with FDA CFR 21 Part 11 requirements
- Mass spectrometry
- Ion and Gas chromatography
- Molecular Biology
- Cell cultures
- Electrochemistry
- Immunochemistry

Digital Record Keeping
The PURELAB Pharma Compliance’s admin functions, security and data integrity capabilities, password accessibility, audit trail procedures & permissions all meet national regulators best practice for data management in QC labs following GMP standards.

Cost Effective
The PURELAB Pharma Compliance delivers the water to support the QC tests necessary to validate drug purity in pharma manufacturing. Consumables are designed to minimise cost and waste.

Ideal Applications:
- AT A GLANCE

Overview:
- QC labs wanting to meet high level GMP regulations
- QC labs with FDA CFR 21 Part 11 requirements
- Mass spectrometry
- Ion and Gas chromatography
- Molecular Biology
- Cell cultures
- Electrochemistry
- Immunochemistry

Ideal Applications:
- Ultra trace and qualitative analyses
- Chemical Biology
- Cell cultures
- Electrochemistry
- Immunochemistry

See specification on page 52
PURELAB®
Chorus 2+

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 achieve >10 MΩ.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 measured and dispensed with confidence from the system or from a choice of additional Halo or Remote Dispenser.

Overview:
- Type II+ Water - 10 MΩ.cm
- Litres per day: Up to 216

Key Features:
- Tap to Type II
- Fully Re-circulating
- Multiple Dispensing

Ideal Applications:
- Electrochemistry
- Cell Culture
- Spectrophotometry
- Feed to Ultrapure Water
- Media / Buffer Preparation
- General Chemistry

Fully Recirculating
ELGA’s patented fully recirculated EDI provides a constant supply of high purity that guarantees a minimum of 10 MΩ.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.

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

Reduced Maintenance Times
Quick and easy replacement of consumables as well as semi-automated sanitization to reduce maintenance times.

Economical
Optional CO₂ removal from the purified water (post RO) increasing the life of downstream consumables.

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

See specification on page 53

*If fitted with Halo dispenser

WWW.ELGALABWATER.COM
THE PURELAB® RANGE
CHORUS FAMILY
PURELAB®
Chorus 2

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. It dispenses up to 480 Litres of pure water per day from a potable water supply for general laboratory applications.

Overview:
- Type II - 10 MΩ.cm
- Litres per day: Up to 480

Key Features:
- Easy Configurability
- Modular

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

AT A GLANCE

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

Simplicity
Simple to install, operate and maintain with prioritized information displayed at all times (system status, alarm) for absolute confidence as you dispense.

Economical
Optional CO₂ 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.

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

Reduced Maintenance Times
Quick and easy replacement of consumables as well as simple sanitization to reduce maintenance time.

See specification on page 54
PURELAB®
Chorus 3

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. It can also be used as a feed to other ELGA water systems.

Overview:
- Type III Water - 10 MΩ.cm
- Litres per day: Up to 720
- RO Water

Key Features:
- Easy Configurability
- Auto Rinse
- Modular

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

Configuration
Ability to configure multiple systems to increase flow rate.

Simplicity
Simple to install, operate and maintain with prioritized information displayed at all times (system status, alarm) for absolute confidence as you dispense.

Economical
Optional CO2 removal from the purified water (post RO) increasing the life of downstream consumables.
Option to reduce water consumption for low hardness feed waters.

Auto Rinse
Maintains purity of water during periods of low use.

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

Reduced Maintenance Times
Quick and easy replacement of consumables as well as semi-automated sanitization to reduce maintenance time.

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.

See specification on page 47
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 CO2.

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.

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Capacity: 15 Litres
Dimensions (mm): 485 (h) x 376 (w) x 347 (d)*
Flow Rate: 6 l/min

Capacity: 30 Litres
Dimensions (mm): 676 (h) x 376 (w) x 347 (d)*
Flow Rate: 8 l/min

Capacity: 60 Litres
Dimensions (mm): 590 (h) x 532 (w) x 534 (d)*
Flow Rate: 10 l/min

Capacity: 100 Litres
Dimensions (mm): 805 (h) x 532 (w) x 524 (d)*
Flow Rate: 10 l/min

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* Please allow for ±8mm tolerance
PURELAB®
Dispensing Solutions
PURELAB® Dispenser

The only remote dispenser on the market with an in-built water quality monitor – providing maximum reassurance that you are not losing purity as you move to a free-standing solution. Together with PURELAB Chorus & Quest you can quickly and easily create a bespoke water purification solution for your lab. The PURELAB Dispenser enables uninterrupted discovery.

**AT A GLANCE**

**Overview:**
- Type I Water - 18.2 Ω.cm
- Litres per day: Up to 480

**Key Features:**
- Unrivaled purity in design
- Unmatched flexibility
- Effortless use
- Simple & easy installation

**Ideal Applications:**
- Life Science applications (cell culture, PCR, genomics, dissolution testing, western blotting)
- Chromatographic techniques
- (HPLC, UHPLC, LC-MS/MS, ICP-MS, AAS)

**Accuracy**
- Flexible dispensing with unrivalled built in purity monitoring sensor
- Delivering proof of water purity
- Repeated volume dispensing
- Improving lab efficiency
- Reproducible results

**Streamlined footprint**
- Maximized lab space
- Optimization of storage space
- Up to 4 dispensers per water purifier*

*Dependent on water purifier purchased.

**Simple use and maintenance**
- Plug and Play installation with PURELAB range
- Height adjustable, 180° rotating arm and flexible dispenser arm
- IPX7 rating dispenser handset with menu navigation
- Optional connection to point of use filtration

**Efficient**
- From precise drop by drop up to 2 litres per minute allowing for the right speed including calibration work
- Variable flow rate for easier filling of different sizes of labware
- Volumetric dispensing freeing you to continue working while water is being dispensed
- Profile & locked dispensing allowing you to choose your desired amount of water and prevent accidental flooding
Halo Dispense Solutions

The PURELAB range offers a variety of dispensing and monitoring solutions to customers enabling the ultimate flexibility when using PURELAB Chorus 1, Chorus 1 Complete, & Quest.

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

**Multiple Positioning**
Position the dispenser on the benchtop or independent from the water purification system to optimise your valuable lab space.

**Flexible Dispensing**
- Variable flow
- Auto-volume dispense
- Hands free
- Locked dispense
- Hand-held dispensing
- Profile dispense

**Halo Glow**
The unique glow changes colour and flashes alerting you to changes in the system performance.

**Water monitoring & Real-Time TOC Monitoring**
Water is monitored right to the point of dispense for complete peace of mind and real time TOC monitoring for critical applications.

*Only for PURELAB Chorus range
**Only for PURELAB Chorus 1*
### Feedwater Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Source</td>
<td>Portable Water Source</td>
</tr>
<tr>
<td>Conductivity</td>
<td>≤ 2000 μS/cm (high conductivity feedwaters may lower purification pack life and raise Type III water conductivity)</td>
</tr>
<tr>
<td>Hardness</td>
<td>≤ 350 ppm as CaCO₃</td>
</tr>
<tr>
<td>Free Chlorine</td>
<td>≤ 0.05 ppm Cl⁻</td>
</tr>
<tr>
<td>Chloramine</td>
<td>≤ 0.02 ppm Cl⁻</td>
</tr>
<tr>
<td>Total Chlorine</td>
<td>≤ 0.05 ppm Cl⁻</td>
</tr>
<tr>
<td>Silica</td>
<td>≤ 30 ppm SiO₂</td>
</tr>
<tr>
<td>Carbon Dioxide (CO₂)</td>
<td>≤ 30 ppm (recommended ≤ 20 ppm)</td>
</tr>
<tr>
<td>Fouling Index</td>
<td>≤ 10</td>
</tr>
<tr>
<td>Iron/Manganese</td>
<td>≤ 0.5 ppm Fe/Mn</td>
</tr>
<tr>
<td>TOC (Total Organic Carbon)</td>
<td>Recommended ≤ 2 ppm</td>
</tr>
<tr>
<td>pH</td>
<td>Effectively Neutral</td>
</tr>
<tr>
<td>Particulates</td>
<td>0.2 μm filtration</td>
</tr>
<tr>
<td><strong>Recommended daily volume</strong></td>
<td>Up to 10 l/day (2.2 gal)</td>
</tr>
</tbody>
</table>

### PURELAB Quest Specifications

<table>
<thead>
<tr>
<th>Type</th>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type I</td>
<td>Resistivity</td>
<td>≥ 18.2 MΩ.cm @ 25°C</td>
</tr>
<tr>
<td>Type II</td>
<td>Resistivity</td>
<td>≥ 1 MΩ.cm @ 25 °C</td>
</tr>
<tr>
<td>Type III</td>
<td>Conductivity</td>
<td>&lt; 20 μS/cm</td>
</tr>
<tr>
<td>Type II</td>
<td>Conductivity</td>
<td>&lt; 200 μS/cm</td>
</tr>
<tr>
<td></td>
<td>TOC</td>
<td>≤ 8 ppm</td>
</tr>
<tr>
<td></td>
<td>Bacterial/TVC</td>
<td>≤ 2000 CFU/l</td>
</tr>
<tr>
<td></td>
<td>Inorganic and Bacterial Rejection</td>
<td>&gt; 99%</td>
</tr>
<tr>
<td></td>
<td>Organic Rejection (MW &gt; 200 Da)</td>
<td>&gt; 99%</td>
</tr>
<tr>
<td></td>
<td>Production Flow</td>
<td>10 l/hr</td>
</tr>
<tr>
<td></td>
<td><strong>Recommended daily volume</strong></td>
<td>Up to 10 l/day</td>
</tr>
</tbody>
</table>

### OPERATIONAL WEIGHT

- **Type I** water: 25.4 kg (56.2 lbs)
- **Type II** water: 3.6 kg (8.0 lbs)
- **Type III** water: 21.4 kg (47.2 lbs)

### INSTALLATION

- Benchtop or wall-mounted
- Main Input: 100 - 240 VAC, 50 - 60 Hz
- Power Required (Excluding Pump and UV): 24 V DC
- Power Consumption: 120 VA
- Noise Output: < 40 dBA

### PIPE CONNECTIONS

- Inlet: 8mm (5/16) OD Tube
- Outlet: 8mm (5/16) OD Tube
- Drain: 8mm (5/16) OD Tube
- Reservoir Inlets: 8mm (5/16) OD Tube
- Reservoir Outlets: 8mm (5/16) OD Tube
- Equipment: Remote Dispenser

### ENVIRONMENT

- Temperature: 4 - 40 °C (recommended 10 - 25 °C)
flex 1 & 2

<table>
<thead>
<tr>
<th>Application</th>
<th>PURELAB Flex 1</th>
<th>PURELAB Flex 1 (with purification pack)</th>
<th>PURELAB Flex 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily volume</td>
<td>&gt;10 Litres</td>
<td>&gt;10 Litres</td>
<td>&gt;10 Litres</td>
</tr>
<tr>
<td>Dispense Flowrate</td>
<td>Up to 2.0 l/min</td>
<td>Up to 2.0 l/min</td>
<td>Up to 2.0 l/min</td>
</tr>
<tr>
<td>Inorganics @ 25°C</td>
<td>As per feedwater</td>
<td>18.2 MΩ.cm</td>
<td>18.2 MΩ.cm</td>
</tr>
<tr>
<td>Total organic carbon (TOC)</td>
<td>Dependent on feedwater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bacteria</td>
<td>&lt;0.1 CFU/ml◊</td>
<td>&lt;0.1 CFU/ml◊</td>
<td>&lt;0.001 CFU/ml◊</td>
</tr>
<tr>
<td>Bacterial Endotoxin</td>
<td>N/A</td>
<td>&lt;0.001 EU/ml‡</td>
<td>&lt;0.001 EU/ml‡</td>
</tr>
<tr>
<td>RNase*</td>
<td>N/A</td>
<td>N/A</td>
<td>&lt;1 pg/ml*</td>
</tr>
<tr>
<td>DNase*</td>
<td>N/A</td>
<td>N/A</td>
<td>&lt;5 pg/ml*</td>
</tr>
</tbody>
</table>

◊ With C134/145/197 POU filter/Biofilter  ‡ With LC197 Biofilter 1 Dependent on feedwater

Source Originally from potable supply, then pretreated. Preferably reverse osmosis (RO) or filtered service deionization (SDI) or distilled.

Fouling index (max) <1 for all models

Free Chlorine <0.05 ppm max

TOC N/A

Carbon dioxide  10 ppm recommended

Silica (recommended max) <2 ppm

Particulates - 5-10 μm

Temperature 4-40°C (Recommend 10-15°C)

Flowrate (maximum requirement) >2 l/min (0.5 USG)

Drain requirements None required

Feedwater pressure 1.5 bar (22 psi) maximum; Flooded suction minimum

* Fit LA652 Pressure Regulator where feedwater pressure exceeds specified limits

** Values not from analyser connection

flex 3 & 4

<table>
<thead>
<tr>
<th>Application</th>
<th>PURELAB Flex 3</th>
<th>PURELAB Flex 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily volume</td>
<td>&lt;10 Litres</td>
<td>&lt;10 Litres</td>
</tr>
<tr>
<td>Dispense Flowrate</td>
<td>Up to 2.0 l/min</td>
<td>Up to 2.0 l/min</td>
</tr>
<tr>
<td>Reverse osmosis make-up flow rate at 15°C</td>
<td>10 l/hour</td>
<td>N/A</td>
</tr>
<tr>
<td>Inorganics @ 25°C</td>
<td>18.2 MΩ.cm</td>
<td>18.2 MΩ.cm</td>
</tr>
<tr>
<td>Total organic carbon (TOC)</td>
<td>&lt;1 pg/ml</td>
<td>&lt;1 pg/ml</td>
</tr>
<tr>
<td>Bacteria</td>
<td>&lt;0.001 CFU/ml◊</td>
<td>&lt;0.001 CFU/ml◊</td>
</tr>
<tr>
<td>Bacterial Endotoxin</td>
<td>&lt;0.001 EU/ml‡</td>
<td>&lt;0.001 EU/ml‡</td>
</tr>
<tr>
<td>RNase*</td>
<td>&lt;1 pg/ml</td>
<td>&lt;1 pg/ml*</td>
</tr>
<tr>
<td>DNase*</td>
<td>&lt;5 pg/ml</td>
<td>&lt;5 pg/ml*</td>
</tr>
</tbody>
</table>

◊ Dependent on feed water  ‡ With LC197 Biofilter

Source Potable tap water

Fouling index (max) <10 | <1

Free Chlorine <6.5 ppm max | <0.5 ppm max

TOC < 100 ppm recommended | <10 ppm recommended

Carbon dioxide <30 ppm (recommended <20 ppm) | 5-10 ppm

Silica (recommended max) | 5-10 ppm

Particulates - 5-10 μm

Temperature 4-40°C (Recommended 10-15°C)

Flowrate (maximum requirement) Up to 75 l/hr (20 USG) | Up to 75 l/hr (20 USG)

Drain requirements | Up to 75 l/hr (20 USG) | Up to 75 l/hr (20 USG)

Feedwater pressure 6 bar (90 psi) max; 2 bar (30 psi) min | 6 bar (90 psi) max; 0.07 bar (1 psi) min

* Fit LA652 Pressure Regulator where feedwater pressure exceeds specified limits

** Values not from analyser connection
### TREATED WATER SPECIFICATIONS

<table>
<thead>
<tr>
<th>Application</th>
<th>PURELAB Flex 5</th>
<th>PURELAB Flex 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily volume</td>
<td>&lt;10 litres</td>
<td>&lt;10 litres</td>
</tr>
<tr>
<td>Delivery flow rate</td>
<td>Up to 2.0 l/min</td>
<td>Up to 2.0 l/min</td>
</tr>
<tr>
<td>Reverse osmosis make-up flow rate</td>
<td>1 l/min</td>
<td>1 l/min</td>
</tr>
<tr>
<td>Inorganics (resistivity @25°C)</td>
<td>18.2 MΩ.cm</td>
<td>18.2 MΩ.cm</td>
</tr>
<tr>
<td>Organics (TOC) - typical</td>
<td>&lt;5 ppb*</td>
<td>&lt;5 ppb*</td>
</tr>
<tr>
<td>Direct from internal reservoir</td>
<td>Type III / RO Water</td>
<td>Type III / RO Water</td>
</tr>
<tr>
<td>Bacteria - typical (when fitted with POU filter)</td>
<td>&lt;1 CFU/10ml</td>
<td>&lt;1 CFU/10ml</td>
</tr>
<tr>
<td>Bacteria - typical (when fitted with Biofilter)</td>
<td>&lt;1 CFU/10ml</td>
<td>&lt;1 CFU/10ml</td>
</tr>
<tr>
<td>Endotoxin (when fitted with Biofilter)</td>
<td>&lt;0.001 EU/ml</td>
<td>&lt;0.001 EU/ml</td>
</tr>
<tr>
<td>DNase (when fitted with Biofilter)*</td>
<td>&lt;20 pg/ml</td>
<td>&lt;5 pg/ml*</td>
</tr>
<tr>
<td>RNase (when fitted with Biofilter)*</td>
<td>&lt;0.002 ng/ml</td>
<td>&lt;5 pg/ml*</td>
</tr>
<tr>
<td>Temperature</td>
<td>4 - 40°C</td>
<td>4 - 40°C</td>
</tr>
<tr>
<td>Flowrate (requirement at 15°C)</td>
<td>15 l/hr</td>
<td>15 l/hr</td>
</tr>
<tr>
<td>Drains requirements (gravity fall with air gap)</td>
<td>75 mm</td>
<td>75 mm</td>
</tr>
</tbody>
</table>

### FEEDWATER REQUIREMENTS

<table>
<thead>
<tr>
<th>Source</th>
<th>Potable tap water</th>
<th>Potable tap water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conductivity</td>
<td>&lt;2000 µS/cm*</td>
<td>&lt;2000 µS/cm*</td>
</tr>
<tr>
<td>Hardness</td>
<td>≤350 ppm as CaCO₃</td>
<td>≤5 ppm as CaCO₃</td>
</tr>
<tr>
<td>Silica</td>
<td>≤50 ppm</td>
<td>≤50 ppm</td>
</tr>
<tr>
<td>Carbon Dioxide Maximum</td>
<td>≤0 ppm (recommended), ≤10 ppm</td>
<td>≤0 ppm (recommended), ≤10 ppm</td>
</tr>
<tr>
<td>Chloride</td>
<td>≤150 ppm</td>
<td>≤150 ppm</td>
</tr>
<tr>
<td>Iron / Manganese</td>
<td>≤0.5 ppm</td>
<td>≤0.5 ppm</td>
</tr>
<tr>
<td>Organics (TOC)</td>
<td>≤10 ppb</td>
<td>≤5 ppb recommended</td>
</tr>
</tbody>
</table>

### ELECTRICAL REQUIREMENTS

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Height: 490-1520mm, Width: 220mm, Depth: 470mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>28 kg (61.7 lbs)</td>
</tr>
<tr>
<td>Installation</td>
<td>Bench / wall</td>
</tr>
<tr>
<td>Maximum</td>
<td>10 psi (69 kPa)</td>
</tr>
<tr>
<td>Mains input</td>
<td>100-240V ac, 50-60Hz</td>
</tr>
<tr>
<td>System control voltage (not including pumps and UV)</td>
<td>24V ac</td>
</tr>
<tr>
<td>Power consumption during peak demand</td>
<td>100VA</td>
</tr>
<tr>
<td>Noise Level</td>
<td>&lt;54dBa</td>
</tr>
</tbody>
</table>

*Dependent on feed water

*Values not from analyzer connection
# TREATED WATER SPECIFICATIONS

## FEEDWATER REQUIREMENT

**Chorus 1** - Ultrafiltration particulate filter removal of endotoxin and large molecules for Life Science Applications

### Process Flow PURELAB Chorus 1 - Life Science

![Process Flow Diagram](image)

### Process Flow PURELAB Chorus 1 - Analytical Research

![Process Flow Diagram](image)

### Process Flow PURELAB Chorus 1 - General Science

![Process Flow Diagram](image)

### TREATED WATER SPECIFICATIONS

#### FEEDWATER REQUIREMENT

<table>
<thead>
<tr>
<th>Application</th>
<th>Life Science</th>
<th>Analytical Research</th>
<th>General Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dispense Flowrate</td>
<td>Up to 3.0 l/min</td>
<td>Up to 3.0 l/min</td>
<td>Up to 3.0 l/min</td>
</tr>
<tr>
<td>Treated Water</td>
<td>18.2 MΩ cm</td>
<td>18.2 MΩ cm</td>
<td>18.2 MΩ cm</td>
</tr>
<tr>
<td>Total organic carbon (TOC)</td>
<td>&lt;10 ppb</td>
<td>&lt;10 ppb</td>
<td>&lt;10 ppb</td>
</tr>
<tr>
<td>Total organic carbon (TOC)</td>
<td>&lt;10 ppb</td>
<td>&lt;10 ppb</td>
<td>&lt;10 ppb</td>
</tr>
<tr>
<td>Bacterial Endotoxin</td>
<td>&lt;0.001 EU/ml</td>
<td>&lt;0.001 EU/ml</td>
<td>&lt;0.001 EU/ml</td>
</tr>
<tr>
<td>pH</td>
<td>Effectively neutral</td>
<td>Effectively neutral</td>
<td>Effectively neutral</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>&lt;20 ppm</td>
<td>&lt;20 ppm</td>
<td>&lt;20 ppm</td>
</tr>
<tr>
<td>Free Chlorine</td>
<td>0.5 ppm max</td>
<td>0.5 ppm max</td>
<td>0.5 ppm max</td>
</tr>
<tr>
<td>Flowrate (maximum requirement)</td>
<td>130 l/hr (34 USG)</td>
<td>130 l/hr (34 USG)</td>
<td>130 l/hr (34 USG)</td>
</tr>
<tr>
<td>Temperature</td>
<td>1-35°C (Recommended 10-15°C)</td>
<td>1-35°C (Recommended 10-15°C)</td>
<td>1-35°C (Recommended 10-15°C)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>Height 435mm, Width 375mm, Depth 340mm</td>
<td>Height 435mm, Width 375mm, Depth 340mm</td>
<td>Height 435mm, Width 375mm, Depth 340mm</td>
</tr>
<tr>
<td>Weight</td>
<td>19 kg (42 lbs)</td>
<td>19 kg (42 lbs)</td>
<td>18 kg (40 lbs)</td>
</tr>
</tbody>
</table>

---

**Chorus 1 Complete**

### Process Flow PURELAB Chorus Complete

![Process Flow Diagram](image)

### Application

- Dispense Flowrate: 10 l/hr
- Dispense Flowrate: 20 l/hr
- Treated Water: 18.2 MΩ cm
- Treated Water: 18.2 MΩ cm
- Total organic carbon (TOC): <10 ppb
- Total organic carbon (TOC): <10 ppb
- Bacterial Endotoxin: <0.001 EU/ml
- Bacterial Endotoxin: <0.001 EU/ml
- pH: Effectively neutral
- pH: Effectively neutral
- Carbon dioxide: Ideally <20 ppm
- Free Chlorine: 0.5 ppm max
- Fouling index (max): <10
- Source: Potable mains water supply
- Flowrate (maximum requirement): Up to 3 l/min (0.5 USG)
- Temperature: 1-35°C (Recommended 10-15°C)
- Time limit for maximum temperature (max): 30 minutes
- Temperature: 1-35°C (Recommended 10-15°C)
- Time limit for maximum temperature (max): 30 minutes
- Flowrate (maximum requirement): Up to 3 l/min (0.5 USG)
- Feedwater pressure: 0.7 bar (10 psi) max

### Dimensions

- Height: 679mm, Width: 376mm, Depth: 353mm
- Weight: 17 kg (37 lbs), 18 kg (40 lbs)
- Weight: 17 kg (37 lbs), 18 kg (40 lbs)

---

**PURELAB® Chorus Process Flow for PURELAB Chorus Complete**

![Process Flow Diagram](image)

---

**PURELAB® Chorus Complete**

![Process Flow Diagram](image)

---

**PURELAB® Chorus Complete**

![Process Flow Diagram](image)
**Pharma Compliance**

**Pharma Compliance Flow Diagram**

---

### Chorus 2+

**Application**

**Chorus 2+**

**Chorus 2+**

**Nominal output at 15°C**

**10 l/hr**

**20 l/hr**

**Nominal daily output**

**240 l/day**

**480 l/day**

**Inorganics @25°C**

1 to >15 MΩ.cm

**Organics (MW>200 Dalton)**

>99% rejection

**Total organic carbon (TOC)**

<10 ppb

**Bacteria**

<0.001 CFU/ml◊

**pH**

Effectively neutral

**Particles (filtration)**

<0.2 μm

**Purification pack capacity**

Litres to 15 MΩ.cm = 74,700/(μS/cm + (2.3 x ppm CO₂))

* 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 LC134/145 POU filter

---

### Application Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>Potable mains water supply</td>
</tr>
<tr>
<td>Flowrate (maximum requirement)</td>
<td>130 l/hr (34 USG)</td>
</tr>
<tr>
<td>Drain requirements</td>
<td>Up to 2 l/min (0.5 USG) (Gravity fall with air gap) Max during service</td>
</tr>
<tr>
<td>Flowrate (maximum)</td>
<td>130 l/hr (34 USG)</td>
</tr>
<tr>
<td>Minimum inlet pressure</td>
<td>0.3 bar (0.4 psi)</td>
</tr>
<tr>
<td>Maximum inlet pressure</td>
<td>0.6 bar (0.9 psi)</td>
</tr>
<tr>
<td>Conductivity</td>
<td>&lt;2500 μS/cm</td>
</tr>
<tr>
<td>Calcium</td>
<td>&lt;1 ppm max</td>
</tr>
<tr>
<td>Temperature</td>
<td>1–40°C (Recommended 10–15°C)</td>
</tr>
<tr>
<td>Feedwater pressure</td>
<td>0.5 bar (7.5 psi) max</td>
</tr>
<tr>
<td>Feedwater pressure</td>
<td>0.1 bar (0.5 psi) min</td>
</tr>
<tr>
<td>Feedwater pressure</td>
<td>0.07 bar (1.0 psi) min</td>
</tr>
<tr>
<td><strong>Dispenser Flow Rate</strong></td>
<td>up to 2 l/min</td>
</tr>
<tr>
<td><strong>Total Organic Carbon (TOC)</strong></td>
<td>&lt;1 ppb</td>
</tr>
<tr>
<td><strong>Bacterial Endotoxin</strong></td>
<td>&lt;0.001 CFU/ml◊</td>
</tr>
<tr>
<td><strong>Bacterial Spec</strong></td>
<td>&gt;99% rejection</td>
</tr>
<tr>
<td><strong>Dnases</strong></td>
<td>&gt;15 MΩ.cm</td>
</tr>
<tr>
<td><strong>Particles</strong></td>
<td>&lt;0.2 μm</td>
</tr>
<tr>
<td><strong>Recirculation Mode</strong></td>
<td>During periods of non-use the unit will automatically operate in intermittent (5 minutes every 1 hour) recirculation mode to maintain water purity with maximum efficiency.</td>
</tr>
</tbody>
</table>

---

**Chorus 2+ Process Flow Diagram**

---

**TREATED WATER SPECIFICATIONS**

**FEEDWATER SPECIFICATIONS**

**FEEDWATER PRESSURE AND FLOWRATE**

---

**TREATED WATER SPECIFICATIONS**

**FEEDWATER REQUIREMENTS**

---

**APPLICATION SPECIFICATIONS**

**Chorus 2+ Application Specifications**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dispenser Flow Rate</strong></td>
<td>up to 2 l/min</td>
</tr>
<tr>
<td><strong>Total Organic Carbon (TOC)</strong></td>
<td>&lt;1 ppb</td>
</tr>
<tr>
<td><strong>Bacterial Endotoxin</strong></td>
<td>&lt;0.001 CFU/ml◊</td>
</tr>
<tr>
<td><strong>Bacterial Spec</strong></td>
<td>&gt;99% rejection</td>
</tr>
<tr>
<td><strong>Dnases</strong></td>
<td>&gt;15 MΩ.cm</td>
</tr>
<tr>
<td><strong>Particles</strong></td>
<td>&lt;0.2 μm</td>
</tr>
<tr>
<td><strong>Recirculation Mode</strong></td>
<td>During periods of non-use the unit will automatically operate in intermittent (5 minutes every 1 hour) recirculation mode to maintain water purity with maximum efficiency.</td>
</tr>
</tbody>
</table>

---

**WATER SOURCE**

Pre-treated preferably RO, DI or distilled.

**Dispenser flow-rate**

1 to 2 L/min

**Flow Diagram**

**Optimize your water purity at the point of use:**

- **Biofilter:** Endotoxin removal (<0.001 EU/ml), DNase removal (<5 pg/ml), RNase removal (<0.002 ng/ml)
- **Microfilter:** Particulate removal (<0.2 μm)

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**THE PURELAB® RANGE**

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**SPECSIFICATIONS**

**FEEDWATER & REQUIREMENT**

---

**TREATED WATER**

---

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**The Purelab® Range**

---

**Elga Labwater**

---

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---
**Chorus 2 & 3**

**Process Flow**

**PURELAB® Chorus 2 (RO/DI)**

- **Application**
  - Feedwater
  - Inlet
  - Booster Pump
  - Degassing (optional)
  - Sensor
  - Water Purity
  - Outlet
  - Drain

**Chorus 2 & 3**

- **Process Flow**
  - Feedwater
  - Inlet
  - Booster Pump (optional)
  - Degassing (optional)
  - Sensor
  - Water Purity
  - Outlet
  - Drain

**TREATED WATER SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Feedwater Requirements</th>
<th>PURELAB® Chorus 2 (RO/DI)</th>
<th>PURELAB® Chorus 3 (RO)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nominal daily output</strong></td>
<td>240 l/day</td>
<td>480 l/day</td>
</tr>
<tr>
<td><strong>Nominal daily output</strong></td>
<td>240 l/day</td>
<td>480 l/day</td>
</tr>
<tr>
<td><strong>Ingressions (IP)</strong></td>
<td>- 20ppm rejection</td>
<td>- 20ppm rejection</td>
</tr>
<tr>
<td><strong>Organics (BOD)</strong></td>
<td>- &lt;0.5 CO₂</td>
<td>- &lt;0.5 CO₂</td>
</tr>
<tr>
<td><strong>Total organic carbon (TOC)</strong></td>
<td>- &lt;15 µg/l</td>
<td>- &lt;15 µg/l</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>Effectively neutral</td>
<td>Effectively neutral</td>
</tr>
<tr>
<td><strong>Particles</strong></td>
<td>- &gt;99% rejection</td>
<td>- &gt;99% rejection</td>
</tr>
<tr>
<td><strong>Organics (MW&gt;200 Dalton)</strong></td>
<td>- &gt;99% rejection</td>
<td>- &gt;95% rejection</td>
</tr>
<tr>
<td><strong>Reservoir Storage</strong></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>Height: 679mm, Width: 376mm, Depth: 353mm</td>
<td>Height: 679mm, Width: 376mm, Depth: 353mm</td>
</tr>
</tbody>
</table>

**Impurities to remove**

- **Nucleases**
- **Endotoxins/Pyrogens**
- **Inorganics**
- **Organics**
- **Bacteria**
- **Particulates**
- **Nucleases**
- **Staphylococcus aureus**
- **Viruses**
- **Bacterial monitoring**
- **Endotoxin monitoring**
- **Purity monitoring to POU**
- **Auto Volume Dispense**
- **Full product validation**

**Find your product**

<table>
<thead>
<tr>
<th>Water Type</th>
<th>Chorus 1</th>
<th>Chorus 2 &amp; 3</th>
<th>flex 1</th>
<th>flex 2</th>
<th>flex 3</th>
<th>flex 5</th>
<th>flex 6</th>
<th>Quest 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RO Type I</strong></td>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
<td><img src="image4.png" alt="Image" /></td>
<td><img src="image5.png" alt="Image" /></td>
<td><img src="image6.png" alt="Image" /></td>
<td><img src="image7.png" alt="Image" /></td>
<td><img src="image8.png" alt="Image" /></td>
</tr>
<tr>
<td><strong>RO Type II</strong></td>
<td><img src="image9.png" alt="Image" /></td>
<td><img src="image10.png" alt="Image" /></td>
<td><img src="image11.png" alt="Image" /></td>
<td><img src="image12.png" alt="Image" /></td>
<td><img src="image13.png" alt="Image" /></td>
<td><img src="image14.png" alt="Image" /></td>
<td><img src="image15.png" alt="Image" /></td>
<td><img src="image16.png" alt="Image" /></td>
</tr>
<tr>
<td><strong>RO Type III</strong></td>
<td><img src="image17.png" alt="Image" /></td>
<td><img src="image18.png" alt="Image" /></td>
<td><img src="image19.png" alt="Image" /></td>
<td><img src="image20.png" alt="Image" /></td>
<td><img src="image21.png" alt="Image" /></td>
<td><img src="image22.png" alt="Image" /></td>
<td><img src="image23.png" alt="Image" /></td>
<td><img src="image24.png" alt="Image" /></td>
</tr>
</tbody>
</table>

**Features**

- **Halo Dispense compatible**
- **Real time TOC monitoring**
- **Potable tap water**
- **Wall mounting**
- **Floor mounting**
- **Purity monitoring to POU**
- **Halo Dispense compatible**
- **Auto Volume Dispense**
- **Variable flow rate dispense**
- **Drop-by-drop control**
- **Connected to POU**
- **USB connection**
- **Full product validation**

**Specifications**

- **USB connection**
- **Locked dispense**
- **Drop-by-drop control**
- **Variable flow rate dispense**
- **Auto Volume Dispense**
- **Halo Dispense compatible**
- **Connected to POU**
- **USB connection**
- **Full product validation**

**Dimensions**

- Height: 679mm, Width: 376mm, Depth: 353mm

*With DI cartridge
*With O1 cartridge
*With LC134/145 POU filter + 8.2mm
+ When fitted with a Halo dispenser solution
*Full product validation needs to be purchased separately.
Find your product

<table>
<thead>
<tr>
<th>Life Science</th>
<th>Analytical Research</th>
<th>General Chemistry</th>
<th>Pharama Compliance</th>
<th>2+ (RO/DI/UV)</th>
<th>2+ (RO/DI/TOC)</th>
<th>2 (RO/TOC)</th>
<th>2 (RO)</th>
<th>flex 1</th>
<th>flex 2</th>
<th>flex 3</th>
<th>flex 4</th>
<th>flex 5</th>
<th>flex 6</th>
<th>UV</th>
<th>Non UV</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PURELAB flex</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PURELAB Quest</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Ideal solution for Systems also have wider applicability. Speak to your local ELGA specialist for further information.

- Cell culture
- Liquid Chromatography (HPLC, UHPLC)
- Microbiological Analysis
- Genomic (PCR, DNA/RNA sequencing, DNA, Nucleic acid)
- Gas Chromatography
- Electrochemistry
- Immunochemistry
- Atomic Spectroscopy (Flame AA, ETA, ICP-AES)
- Mass Spectrometry (ICP-MS, GC-MS, LC-MS)
- General lab water requirement (glassware washing, heating baths, autoclave filling)
- Spectrophotometry (Inc. UV, IR, near IR, near IR)
- Feed to ultrapure water system
- Media/buffer preparation (Inc. pH solutions)
- General Chemistry (Inc. Flowmetry)

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**Product Part Numbers**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>07131256RDF</td>
<td>PURELAB Quest UV with starter pack</td>
</tr>
<tr>
<td>07131256SDF</td>
<td>PURELAB Quest UV with starter pack</td>
</tr>
<tr>
<td>07131256LDF</td>
<td>PURELAB Quest UV with starter pack</td>
</tr>
</tbody>
</table>

- **PURELAB Quest**
  - Ideal solution for Gas Chromatography
  - Feed to ultrapure water system
  - Microbiological Analysis

- **PURELAB Chorus 1 Complete**
  - General Science Ultrapure System

- **PURELAB choruS 2 Complete**
  - Life Science Ultrapure System

- **PURELAB choruS 3 Complete**
  - Analytic Research Ultrapure System

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>07131256RDF</td>
<td>PURELAB Quest UV with starter pack</td>
</tr>
<tr>
<td>07131256SDF</td>
<td>PURELAB Quest UV with starter pack</td>
</tr>
<tr>
<td>07131256LDF</td>
<td>PURELAB Quest UV with starter pack</td>
</tr>
</tbody>
</table>

- **PURELAB Chorus 1 Complete**
  - General Science Ultrapure System

- **PURELAB Chorus 2 Complete**
  - Life Science Ultrapure System

- **PURELAB Chorus 3 Complete**
  - Analytic Research Ultrapure System

**Specifications**

- **Cell culture**
- **Liquid Chromatography (HPLC, UHPLC)**
- **Microbiological Analysis**
- **Genomic (PCR, DNA/RNA sequencing, DNA, Nucleic acid)**
- **Gas Chromatography**
- **Electrochemistry**
- **Immunochemistry**
- **Atomic Spectroscopy (Flame AA, ETA, ICP-AES)**
- **Mass Spectrometry (ICP-MS, GC-MS, LC-MS)**
- **General lab water requirement (glassware washing, heating baths, autoclave filling)**
- **Spectrophotometry (Inc. UV, IR, near IR, near IR)**
- **Feed to ultrapure water system**
- **Media/buffer preparation (Inc. pH solutions)**
- **General Chemistry (Inc. Flowmetry)**
## Product Part Numbers

**PURELAB Chorus 3**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA826</td>
<td>PURELAB Dispenser Installation Kit</td>
</tr>
<tr>
<td>LA827</td>
<td>Worktop (Bench Mounting) Bracket Kit</td>
</tr>
<tr>
<td>LC134</td>
<td>Point-Of-Use 0.2μm Filter (POU). Recommended Change: 3 months</td>
</tr>
<tr>
<td>LC145</td>
<td>Point-Of-Use 0.2μm Filter (POU). Recommended Change: 3 months</td>
</tr>
<tr>
<td>LC197</td>
<td>Point-Of-Use Bio Filter (POU). Recommended Change: 3 months</td>
</tr>
</tbody>
</table>

*Unit is supplied as standard with: 1 x LA826 Installation kit & MANU41319 Operator manual.*

**PURELAB Chorus Reservoirs**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA757</td>
<td>15 Litre Reservoir</td>
</tr>
<tr>
<td>LA758</td>
<td>30 Litre Reservoir</td>
</tr>
<tr>
<td>LA759</td>
<td>60 Litre Reservoir</td>
</tr>
<tr>
<td>LA760</td>
<td>100 Litre Reservoir</td>
</tr>
</tbody>
</table>

*Each reservoir supplied with LA773 Installation Kit & LC216 Composite Vent Filter.*

**PURELAB Chorus 3**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RO310XXM3</td>
<td>PURELAB Chorus 3 RO 10 l/hr</td>
</tr>
<tr>
<td>RO310BPM3</td>
<td>PURELAB Chorus 3 RO 10 l/hr with Boost Pump</td>
</tr>
<tr>
<td>RO320XXM3</td>
<td>PURELAB Chorus 3 RO 20 l/hr</td>
</tr>
<tr>
<td>RO320BPM3</td>
<td>PURELAB Chorus 3 RO 20 l/hr with Boost Pump</td>
</tr>
<tr>
<td>RO330XXM3</td>
<td>PURELAB Chorus 3 RO 30 l/hr</td>
</tr>
<tr>
<td>RO330BPM3</td>
<td>PURELAB Chorus 3 RO 30 l/hr with Boost Pump</td>
</tr>
</tbody>
</table>


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info@elgalabwater.com / www.elgalabwater.com

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Elga Global Operations Centre.
tel: +44 (0) 203 567 7300
fax: +44 (0) 203 567 7205

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