ELGA VEOLIA


# PURELAB®
## Quest

DEDICATED TO DISCOVERY

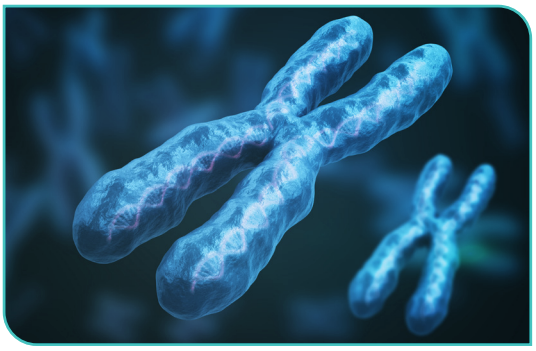
INTRODUCING

# PURELAB Quest


Compact, economical & easy to use

## Laboratory water directly from a tap water input.

# **3 types** of **water** for **every application** in your lab



## T Y P E  I

Ultrapure Water for analytical applications such as HPLC (High Performance Liquid Chromatography), cell culture, tissue culture or molecular biology techniques.

## T Y P E  I I

Pure Water for applications including general reagent preparation, buffers, pH solutions, histology and general chemistry.

## T Y P E  I I I

RO - permeate water for glassware rinsing, water baths, autoclaves, hydroponics and as feed water to Type 1 systems.

# PURELAB Quest **the essential foundation** for your research


## CHOOSE THE RIGHT PURELAB QUEST FOR YOUR RESEARCH

| Application examples | Water Type | PURELAB Quest UV | PURELAB Quest |
|---|---|---|---|
| HPLC | TYPE I | ✓ | — |
| GC-MS | | ✓ | — |
| AA/ICP-OES | | ✓ | ✓ |
| IC | | ✓ | ✓ |
| Molecular biology e.g. DNA sequencing and PCR | | ✓ | — |
| Preparing and diluting buffers and reagents | TYPE II | ✓ | ✓ |
| Tissue culture media | | ✓ | ✓ |
| pH solutions | | ✓ | ✓ |
| Glassware rinsing | TYPE III | ✓ | ✓ |
| Water baths | | ✓ | ✓ |
| Autoclave feeds | | ✓ | ✓ |

# Discover unmatched **value**

## C O M P A C T

232 mm wide. 510 mm high.

Wall mountable; saving valuable lab space.

Integral to your bench work.

## C O N N E C T E D

Quest is IoT enabled with AQUAVISTA
Optional remote monitoring reduces interruptions, costs & environmental impact.

Supported by a global network of water purification experts.


## S U S T A I N A B L E

Made from more than 85% reclaimed materials*.

Designed with long lasting consumables.

ELGA is part of the world's largest environmental services organisation: Veolia.

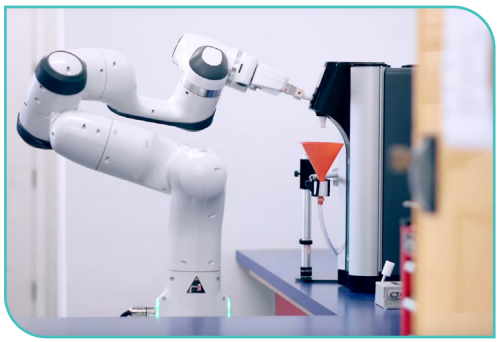

## C O S T E F F E C T I V E

3 types of water from one system means budgets go further.

Space saving design means a more efficient lab and team.

* Excludes materials in contact with purification process.

# Delivering proven **reliability**



## T E S T E D

The PURELAB Quest has been tested through 150,000 cycles of dispensing. That is equivalent to over 20 years of lab use.

Research and development are at the heart of ELGA. Our global network of engineers and scientists are dedicated to lab water applications.

## P R O V E N

PURELAB Quest's components have been proven in tens of thousands of water systems globally and result from over a decade of user experience and feedback.

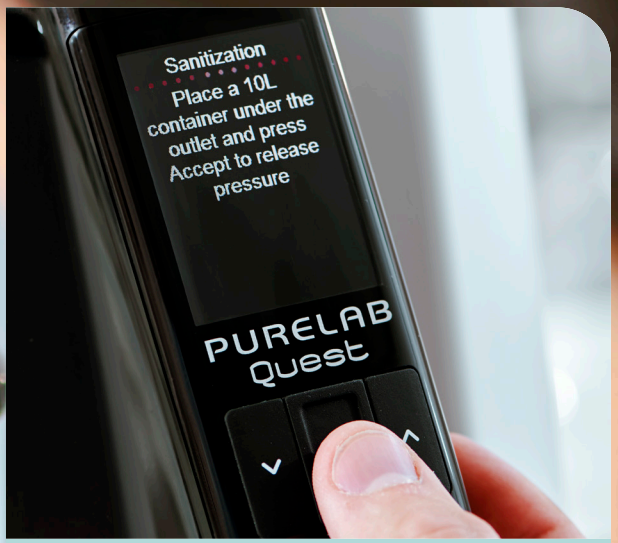
While discovery and research can take a lifetime, PURELAB Quest will deliver the water you need within seconds. Every day is a Quest.


## U N R I V A L L E D

3 water types, multiple quality sensors, clear information, compact, economical, easy to use, fast flow rate, reliable and simple to maintain.

ELGA knows the journey to discovery is challenging. We take care of every little detail so you don't have to, leaving you free to pursue research.

"We understand that water purity has to be beyond doubt every single time it is dispensed"




## STAY BIOFILM-FREE

**Even in ultrapure water systems, biofilm can grow in static water and compromise purity.**

**The PURELAB Quest is designed with in-built periodic recirculation which interferes with the establishment and growth of biofilms.**

**ELGA combines unrivalled expertise, technologies and design with unbeatable service and lasting quality, to ensure science can make progress globally.**

Fig 1

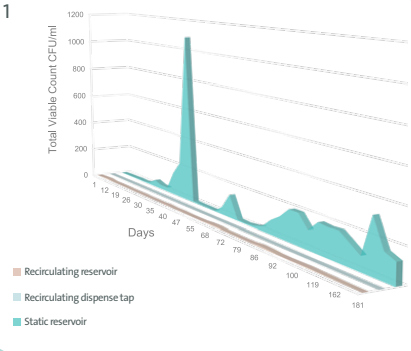



Fig 1: The bacterial level in a static reservoir rose from 4 to over 1000 CFU/ml. The levels in the recirculating reservoir stayed at an average of 2.1 CFU/ml, highlighting a much lower load on any final filter.

**PURELAB Quest is a Veolia trademark and contains patented purification technologies.**

# Ensure **uninterrupted** discovery

## E F F O R T L E S S

A 'plug & play' installation process gives quick access to lab water.

Easy menu navigation in multiple languages.

A purification design that ensures water quality will never risk your Lab work.

AQUAVISTA digital monitoring and a global service network reinforce the ELGA service.

## I N G E N I O U S

Water delivered at 1.2 litres a minute keeps interruptions to a minimum.

Volumetric dispensing means researchers can multi-task rather than wait.

Volumetric control is available from 100ml to 7 litres.

## I N T U I T I V E

Pre-programmed annual sanitisation.

The simple sanitisation procedure is carried out with minimal user intervention and without exposure to hazardous chemicals.

Easy access to change consumables.


Features
Display Units
Temperature Compe
Auto Volume Calibrat
Sanitization
Change Purification F
Reset Reminders
Exit
PURELAB
Quest
ELGA
PURELAB Quest
CATION PACK

## TECHNICAL APPENDIX 1

# Water specifications (International conformity)

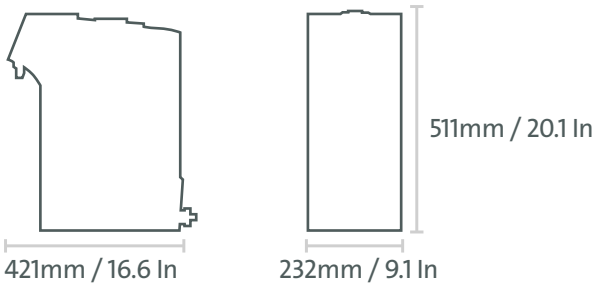
| Feedwater Specifications | |
|---|---|
| Water Source | (Portable Water Source) |
| Conductivity | < 2000 µS/cm<br>(High conductivity feedwaters may lower purification pack life and raise Type III water conductivity) |
| Hardness | < 350 ppm as CaCO ³ |
| Free Chlorine | < 0.05 ppm Cl ² |
| Chloramine | < 0.02 ppm Cl ² |
| Total Chlorine | < 0.05 ppm Cl ² |
| Silica | < 30 ppm SiO ² |
| Carbon Dioxide (CO2) | < 30 ppm (recommended < 20 ppm) |
| Fouling Index | < 10 |
| Iron/Manganese | < 0.5 ppm Fe/Mn |
| TOC (Total Organic Carbon) | Recommended < 2ppm |

| Specifications | PURELAB Quest UV | PURELAB Quest |
|---|---|---|
| **Ultrapure (Type I) water specifications (from fixed dispense tip)** | | |
| Resistivity | 18.2 MΩ.cm @ 25°C | 18.2 MΩ.cm @ 25°C |
| Dispense flow rate | Up to 1.2 l/min (0.27 gal) | Up to 1.2 l/min (0.27 gal) |
| TOC | < 5 ppb | < 30 ppb |
| Bacterial TVC | < 0.1 cfu/ml *¹ | < 0.1 cfu/ml *¹ |
| Endotoxin | < 0.001 Eu/ml *² | < 0.001 Eu/ml *² |
| RNases | < 1 pg/ml | n/a |
| DNases | < 5 pg/ml | n/a |
| pH | Effectively Neutral | Effectively Neutral |
| Particulates | 0.2 µm filtration *¹ | 0.2 µm filtration *¹ |
| Recommended daily volume | Up to 10 l/day *³ | Up to 10 l/day *³ |
| **Pure (Type II) water specifications (Water Outlet port 4)** | | |
| Resistivity | > 1 MΩ.cm @ 25 °C | > 1 MΩ.cm @ 25 °C |
| TOC | < 50 ppb | < 50 ppb |
| Bacterial TVC | < 100 cfu/ml | < 100 cfu/ml |
| Recommended daily volume | Up to 10 l/day *¹ (2.2 gal) | Up to 10 l/day *¹ (2.2 gal) |

# Quest specifications

| RO-permeate (Type III) water specifications (Water Outlet port 5) | | |
|---|---|---|
| Conductivity | < 20 µS/cm *⁴ | < 20 µS/cm *⁴ |
| TOC | < 200 ppb ⁴ | < 200 ppb ⁴ |
| Bacterial TVC | < 1000 cfu/ml ⁴ | < 1000 cfu/ml ⁴ |
| Ionic rejection | > 96 % ⁵ | > 96% ⁵ |
| Particulates and Bacteria rejection | > 99% | > 99% |
| Organic rejection (MW > 200 Da) | > 99% | > 99% |
| Production flow | 10l/hr ⁵ | 10l/hr ⁵ |
| Recommended daily volume | Up to 30l/day | Up to 30l/day |

# TECHNICAL APPENDIX 2
## Production Unit Specification




| PURELAB Quest | PURELAB Quest UV |
|---|---|
| Operational weight | Operational weight |
| 21.4 kg (47.2 lbs) | 23 kg (50.7 lbs) |
| **Installation** | |
| Benchtop or wall-mounted | |
| **Electrical Requirements** | |
| Main Input | 100 - 240 VAC, 50 - 60 Hz |
| Power Required (Excluding Pump and UV) | 24 V DC |
| Power Consumption | 120 VA |
| Noise Output | dBA - < 40 |
| **Pipe connections** | |
| Inlet | 8mm (5/16) OD Tube |
| Outlet | 8mm (5/16) OD Tube |
| Drain | 8mm (5/16) OD Tube |
| Reservoir Outlets | 8mm (5/16) OD Tube |
| Reservoir Overflow | 8mm (5/16) OD Tube |
| **Environment** | |
| Temperature | 4 - 40 °C (recommended 10 - 25 °C) |

*1 When using point of use filters (LC134/LC197)
*2 When using point of use filter (LC197)
*3 Available volume of Type I and II water combined; increased use will reduce purification pack life
*4 Subject to suitable feed water purity (see ionic rejection) and system maintenance
*5 With feed water pressure at > 4 bar and temperature at 15 °C

ELGA VEOLIA

# Dedicated to Discovery

**info@elgalabwater.com / www.elgalabwater.com**

ELGA Labwater are specialists in the engineering, service & support of water purification systems.

Unrivalled product design has achieved international recognition and awards.

Worldwide technical service teams support science & healthcare globally with specialist expertise.

Global digital performance monitoring from AQUAVISTA ensures laboratory work is uninterrupted.

A global supply chain supports clients from regional centres on every continent.

To find your nearest ELGA representative, go to *www.elgalabwater.com* and select your country for contact details.

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

GIT INNOVATIONS AWARD 2010 — 2nd PLACE

reddot design award winner 2011

GOOD DESIGN AWARD 2014

Design Award Gold 2015 TBO

AQUAVISTA DIGITAL SERVICES

OVER 70 INTERNATIONAL PATENTS