

ELGA  VEOLIA



# PURELAB<sup>®</sup> Quest

Dedicated to Discovery

WATER TECHNOLOGIES

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**<sup>™</sup>.  
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.



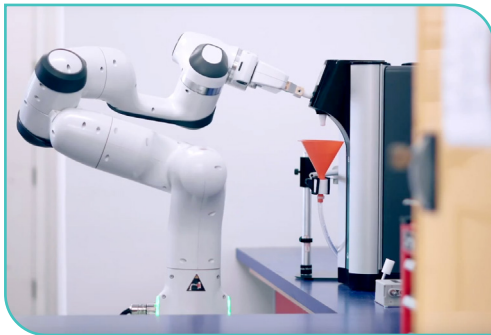
## C O S T E F F E C T I V E

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.

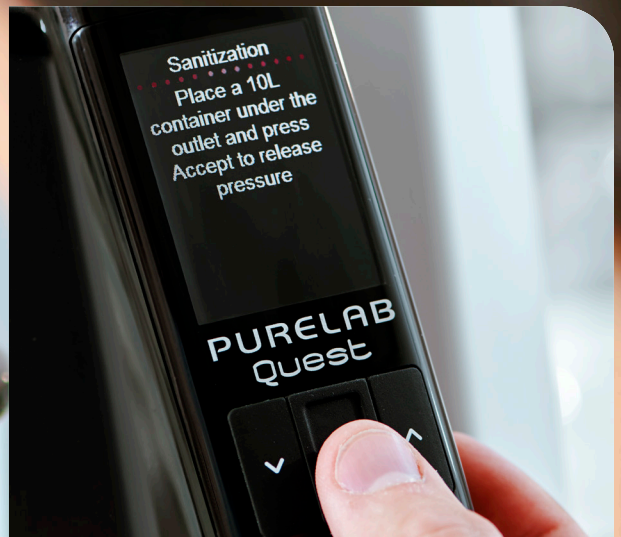


## U N R I V A L L E D

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

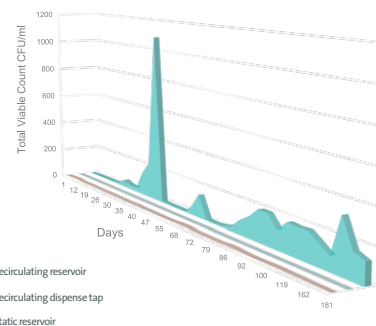


Fig 1: The bacterial level in a static reservoir rose from 4 to over 1000 CFU/ml. The levels in the recirculating reservoir stayed at an average of 2.1 CFU/ml, highlighting a much lower load on any final filter.

**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 Compensation
- Auto Volume Calibration
- 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 $\mu\text{S/cm}$ (High conductivity feedwaters may lower purification pack life and raise Type III water conductivity)
Hardness	< 350 ppm as $\text{CaCO}_3$
Free Chlorine	< 0.05 ppm $\text{Cl}_2$
Chloramine	< 0.02 ppm $\text{Cl}_2$
Total Chlorine	< 0.05 ppm $\text{Cl}_2$
Silica	< 30 ppm $\text{SiO}_2$
Carbon Dioxide ( $\text{CO}_2$ )	< 30 ppm (recommended < 20 ppm)
Fouling Index	< 10
Iron/Manganese	< 0.5 ppm Fe/Mn
TOC (Total Organic Carbon)	Recommended < 2ppm

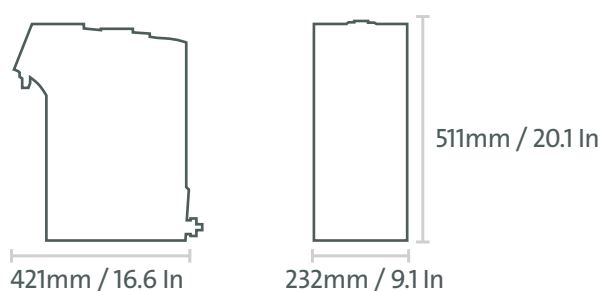
Specifications	PURELAB Quest UV	PURELAB Quest
<b>Ultrapure (Type I) water specifications (from fixed dispense tip)</b>		
Resistivity	18.2 $\text{M}\Omega\cdot\text{cm}$ @ 25°C	18.2 $\text{M}\Omega\cdot\text{cm}$ @ 25°C
Dispense flow rate	Up to 1.2 l/min (0.27 gal)	Up to 1.2 l/min (0.27 gal)
TOC	< 5 ppb	< 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 $\mu\text{m}$ filtration *1	0.2 $\mu\text{m}$ filtration *1
Recommended daily volume	Up to 10 l/day *3	Up to 10 l/day *3
<b>Pure (Type II) water specifications (Water Outlet port 4)</b>		
Resistivity	> 1 $\text{M}\Omega\cdot\text{cm}$ @ 25 °C	> 1 $\text{M}\Omega\cdot\text{cm}$ @ 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

<b>RO-permeate (Type III) water specifications (Water Outlet port 5)</b>		
Conductivity	< 20 $\mu\text{S/cm}$ *4	< 20 $\mu\text{S/cm}$ *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

# Dedicated to Discovery

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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 Hubgrade 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](http://www.elgalabwater.com) and select your country for contact details.

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reddot design award  
winner 2011



GOOD DESIGN  
AWARD 2014



Hubgrade



OVER 70 INTERNATIONAL PATENTS