

# PURELAB

ANALYTICAL RESEARCH



## PURELAB Ultra

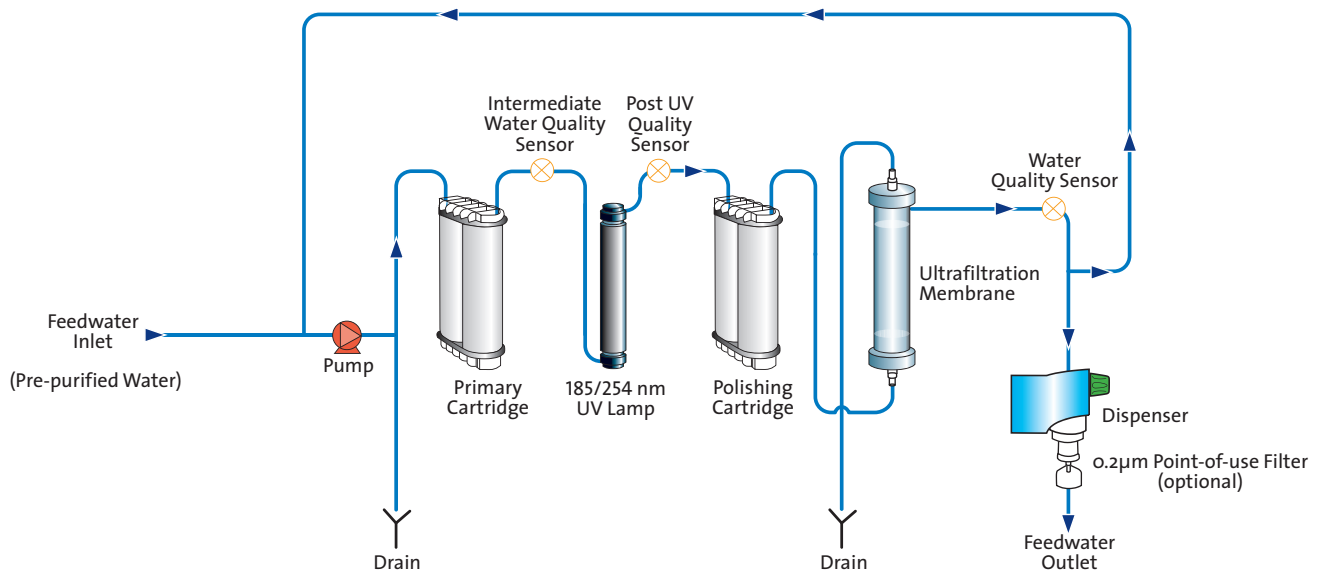
The new PURELAB Ultra is the intelligent ultra-pure water purification system for your most critical applications. It incorporates many unique and innovative features that set it apart from other systems and guarantees water purity to 18.2 MΩ-cm and beyond.

- Ultimate inorganic purity provided by the PureSure system
- Real-time TOC monitoring provides an update on Total Organic Carbon every 2 seconds, ensuring confidence in organic quality
- PureSure system ensures that work is not interrupted by cartridge replacement
- Ongoing bacterial performance guaranteed through complete sanitization of all wetted parts



Guaranteed  
water purity  
for your critical  
applications

### Process Flow PURELAB Ultra Genetic



**ELGA**

**VEOLIA**  
WATER  
Solutions & Technologies

### Treated Water Specifications

Model	Life Science		Analysis		General Science
	Genetic	Bioscience	Analytic	Ionic	Scientific
Flowrate	2.0 l/min max	2.0 l/min max	2.0 l/min max	2.0 l/min max	2.0 l/min max
Inorganics	18.2 MΩ-cm	18.2 MΩ-cm	18.2 MΩ-cm	18.2 MΩ-cm	18.2 MΩ-cm
TOC	<1 ppb <sup>2</sup>	3 – 10 ppb <sup>1</sup>	<1 ppb <sup>2</sup>	3 – 10 ppb <sup>1</sup>	3 – 10 ppb <sup>1</sup>
Bacteria	<0.1 CFU/ml <sup>3</sup>	<0.1 CFU/ml <sup>3</sup>	<0.1 CFU/ml <sup>3</sup>	<0.1 CFU/ml <sup>3</sup>	<1 CFU/ml <sup>3</sup>
Bacterial endotoxin	<0.001 EU/ml	<0.001 EU/ml	–	–	–
pH	Effectively neutral	Effectively neutral	Effectively neutral	Effectively neutral	Effectively neutral
Particles	Ultrafiltration	Ultrafiltration	0.05 µm	0.05 µm	0.2 µm <sup>2</sup>
RNase	<0.002 ng/ml	<0.002 ng/ml	–	–	–
DNase	<20 pg/ml	<20 pg/ml	–	–	–
Labpure cartridge capacity (LC182)	Liters at 18.2 MΩ-cm = 80,000 / µS/cm + (2.3 x ppm CO <sub>2</sub> )				

<sup>1</sup> Dependant on feedwater<sup>2</sup> With LC185 Low TOC Purification Cartridge fitted and fed with purified water from PURELAB Option-R / Pulse or other feeds with <20 ppb TOC. Otherwise TOC will be 1-3 ppb.<sup>3</sup> With POU filter fitted.

### Dimensions and weights

Dimensions	Height 490mm (19.3"), Width 410mm (16.2"), Depth 365mm (14.4")				
Weight	15.0kg (33.1 lb)	14.5kg (32.0 lb)	15.0kg (33.1 lb)	14.5kg (32.0 lb)	14.0kg (30.8 lb)

### Feedwater Requirements

Parameter	Limits
Source - originally from potable supply, then pre-treated	Preferably reverse osmosis (RO) or filtered service deionisation (SDI) or distilled. Note: mixed bed or twin bed deionised supplies should be cation limited at exhaustion.
Fouling Index (max)	1 for all models. A 0.2 micron membrane prefilter is recommended for all non-RO feeds
Service Deionization (SDI) - MΩ-cm	1 MΩ-cm minimum resistivity at exhaustion
Reverse Osmosis (RO) - µS/cm	Recommended <30 µS/cm
Free chlorine	0.05 ppm max
TOC	Recommended 50 ppb max
Carbon dioxide	30 ppm max
Silica	2 ppm max
Particulates	Filtration down to 0.2 micron advisable to protect internal and/or point of use filters
Temperature	1 - 40°C - Recommended 10 - 15°C
Flowrate (maximum requirement)	130 l/hr
Drain requirements (gravity fall with air gap). Maximum during service	Up to 2 l/min
Feedwater Pressure	0.7 bar (10 psi) maximum, 0.07 bar (1 psi) minimum

### Electrical Requirements

Mains input	100 - 240V ac, 50 - 60Hz all models
System voltage	24V dc
Power consumption during recirculation	60VA
Power consumption during dispense	75VA
Fuses	2 x T6.3 Amp
Reservoir level connection	Jack Plug 3.5mm
Noise level during recirculation	<40dBA

### ELGA LabWater

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