PURELAB

RESEARCH & TESTING

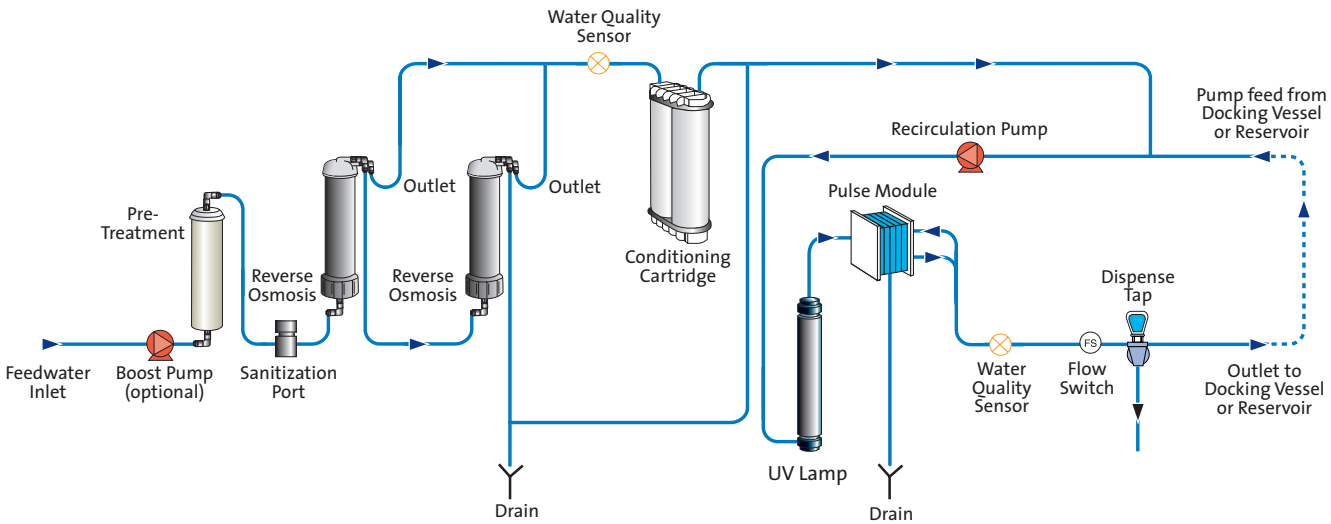
PURELAB Pulse

The PURELAB Pulse is the cost-effective choice for laboratories that require higher output volumes especially in hard water areas. Applications range from sample dilution and reagent preparation, cell culture, media preparation and glassware washing.

- Incorporates patented 'Pulse Technology' using Electrodeionization (EDI) to provide a constant supply of high purity water at economical running costs. No costly resin replacement
- Unique integral recirculation ensures optimum pure water quality at point of dispense
- Improved laboratory productivity – longer periods between sanitization along with quick and easy replacement of consumables reduces maintenance time
- Easy to access whether wall or bench mounted, with a convenient dispense tap. The systems can be used with our wrap-around reservoir to minimize space whilst optimizing purity

The only EDI Type II water system that fully recirculates

Process Flow PURELAB Pulse



ELGA

VEOLIA WATER
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Treated Water Specifications

Model	Pulse 1	Pulse 2
Make up rate @ 15°C [1]	up to 10 l /hr	up to 20 l /hr
Daily output [1]	up to 216 l /24 hour day	up to 216 l /24 hour day
Dispense rate from tap (max)	1.0 l / min-nominal (less with POU filter)	1.0 l / min-nominal (less with POU filter)
Output back pressure (max) [2]	0.1 bar (1 psi)	0.1 bar (1 psi)
Inorganics @25°C [3]	10 to >15 MΩ-cm	10 to >15 MΩ-cm
Total organic carbon (TOC)	<20 ppb	<20 ppb
Bacteria [2]	<1 CFU/10ml	<1 CFU/10ml
pH	Effectively neutral	Effectively neutral
Particles	Optional 0.2 µm POU filter	Optional 0.2 µm POU filter

[1] *Standard conditions are 4 bar inlet pressure, 0 bar back pressure, fed with potable water and a clean pre-treatment cartridge.*

[2] *Subject to correct operating and maintenance procedures and use of POU filter.* [3] *Optimum performance will be achieved with moderate use on moderate feedwaters. At high usage, (>100 l/day) with high Total Conductivity and CO_2 feedwaters (>700µS/cm, 20 ppm CO_2) some reduction in product water resistivity may occur.*

Dimensions and weights

Height, Width, Depth	Height 460mm (18.1in), Width 550mm (21.7in), Depth 270mm (10.6in)	
Operational weight with internal boost pump	20kg (44lb)	21kg (46lb)
Operational weight without internal boost pump	18kg (40lb)	19kg (42lb)
Installation	Bench/wall	Bench/wall

Feedwater Requirements

Source	Potable Mains water supply as detailed below	
Conductivity*	<2000 µS/cm	<2000 µS/cm
Temperature	1 – 35°C	1 – 35°C
Flow rate required (maximum)	80 l/hr	80 l/hr
Drain requirements (minimum)	80 l/hr	80 l/hr
Contaminant		
Hardness	<350 ppm as $CaCO_3$	<350 ppm as $CaCO_3$
Free Chlorine	<0.5 ppm	<0.5 ppm
Chloramine	<0.2 ppm	<0.2 ppm
TOC	<3 ppm	<3 ppm
Silica	<30 ppm	<30 ppm
Fouling Index	<10	<10
Iron/Manganese	<0.2 ppm	<0.2 ppm
CO_2 – maximum**	<30 ppm	<30 ppm
Feedwater Pressure		
Without internal boost pump	90 psi (6.0 bar) maximum, 60 psi (4.0 bar) minimum	
With internal boost pump	30 psi (2.0 bar) maximum, flooded suction minimum	

** A restriction on the daily output may be necessary for feedwater >1400 µS/cm. ** Contact ELGA LabWater for feed water >30ppm*

Electrical Requirements

Mains input	100 - 240V ac, 50 - 60Hz	100 - 240V ac, 50 - 60Hz
System voltage	24V dc	24V dc
Power consumption with boost pump	110VA	110VA
Power consumption without boost pump	85VA	85VA
Fuses	2 x T6.3 Amp	2 x T6.3 Amp
Reservoir level connection	Jack Plug 3.5mm	Jack Plug 3.5mm
Noise level	<45dBA	<45dBA

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