

PURELAB

RESEARCH & TESTING



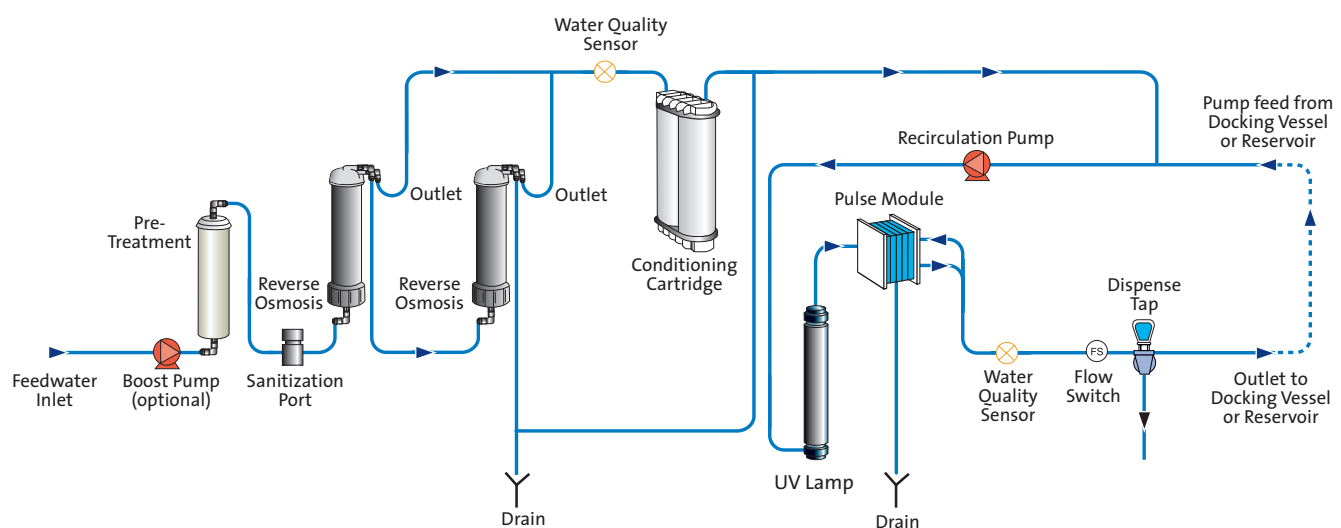
PURELAB Pulse

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



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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 |

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

²Subject to correct operating and maintenance procedures and use of POU filter. ³Optimum performance will be achieved with moderate use on moderate feedwaters. At high usage, (>100 l/day) with high Total Conductivity and CO₂ feedwaters (>700µS/cm, 20 ppm CO₂) 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 |

ELGA LabWater

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