

Protegra CS[®] Pro RO EDI Lab Water System



CONSISTENTLY HIGH WATER QUALITY

The Protegra CS[®] Pro RO EDI system is a high-performance purification solution for deionised water applications. Featuring industry-leading reverse osmosis technology and a high-performance Ionpure[®] CEDI cell, the system maintains water quality at the required standard.

The system is ideal for a range of laboratory and industrial applications with a typical water quality of $> 0.07\mu\text{S}/\text{cm}$ and flow rates up to 1000 l/h at 15°C.

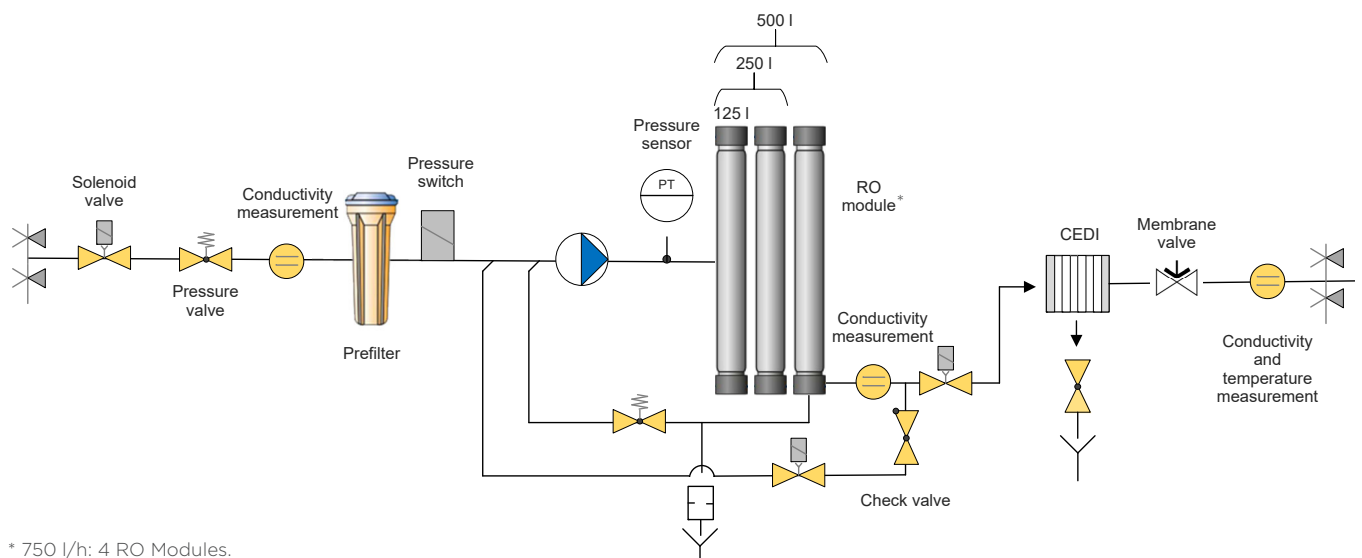
CENTRALISED DISTRIBUTION OF DEIONISED WATER

Our lab systems help improve operations, and reduce maintenance and operating costs by offering flexibility in distribution, sizing and storage. Configure the system to meet your needs working as a standalone or centralised distribution system, delivering water to multiple point of use locations within the building. In a lab environment where space is limited, the compact Protegra CS Pro system also offers the ability to store the storage tank separately.

All models include a range of tank sizes to meet different volume requirements, plus the option of a degassing system to protect the Ionpure cell. See page 2 for information on accessories.

FEATURES

- High-purity deionised water is simple and safe with Ionpure[®] CEDI cell technology
- User-friendly 7-inch HMI touchscreen display
- Intelligent and rugged design prevents downtime
- Service friendly design accessible from all sides
- Optional LED signal lights provide a visual indication of system status
- Monitoring through BMS (Building management system) made possible with Modbus[®] interface
- Data transfer via USB port, microSD-port for data recording and firmware updates



* 750 l/h: 4 RO Modules.
1000 l/h: 6 RO Modules.

SPECIFICATIONS PROTEGRA CS® PRO RO EDI

	125	250	500	750	1000
Delivery flow rate (l/h)	125	250	500	750	1000
Pure water quality (µS/cm)	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Typical pure water quality (µS/cm)	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07
Yield max. (%)	75	75	75	75	75
Feed water specifications					
Pressure (bar)	2.5 - 6	2.5 - 6	2.5 - 6	2.5 - 6	2.5 - 6
Conductivity (µS/cm)	< 1400	< 1400	< 1400	< 1400	< 1400
Silt density index (SDI)	< 3	< 3	< 3	< 3	< 3
Free chlorine (mg/l)	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Iron (mg/l)	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
SiO ₂ (mg/l)*	< 10	< 10	< 10	< 10	< 10
CO ₂ (mg/l)*	< 10	< 10	< 10	< 10	< 10
Temperature (°C)	5 - 30	5 - 30	5 - 30	5 - 30	5 - 30
Hardness (°dH)	< 1ppm	< 1ppm	< 1ppm	< 1ppm	< 1ppm
Technical Data					
Power consumption (kW)	1.0	1.2	2.1	3.0	3.0
Power supply	3/N/PE 400 VAC 50/60 Hz				
Dimensions (H x W x D) (mm)	1795 x 650 x 545		1795 x 650 x 665		1795 x 650 x 780
Mounting	Wheels	Wheels	Feet	Feet	Feet
Shipping weight (kg)	165	180	265	275	295
Part No.	W3T553431	W3T553432	W3T553433	W3T553434	W3T587432

*: in total not larger than 20 mg/l

CONSUMABLES

Part No.	Description	Change Frequency*
W2T526933	Activated carbon/Fine filter cartridge ACB* ²	6 - 12 Months
W2T526551	Fine filter cartridge 5 µm Big Blue* ³	6 - 12 Months
W2T522516	RO Module	2 - 3 Years

*: Change intervals may be shorter, depending on feed water and consumption.

*²: Only for systems with 125 and 250 l/h; *³: Only for systems from 500 l/h on

ACCESSORIES

Part No.	Description
W3T307039	LED signal light (red, yellow, green)
W3T570885*	Communication interface (Modbus Gateway)
W3T262426	Degassing unit
W3T199996	Storage tank* ² 200 l, 550 x 1040 mm
W3T197508	Storage tank* ² 300 l, 650 x 1080 mm
W3T198133	Storage tank* ² 500 l, 770 x 1230 mm
W3T198836	Storage tank* ² 750 l, 720 x 720 x 1700 mm
W3T198753	Storage tank* ² 1000 l, 780 x 780 x 1940 mm
W3T199591	Storage tank* ² 1650 l, 2085 x 720 x 1400 mm
W3T199890	Storage tank* ² 2000 l, 2180 x 720 x 1700 mm
W3T199834	Storage tank* ² 3000 l, 2230 x 850 x 2200 mm

*: only for Protegra CS Pro;

*²: all with level sensor 4 - 20 mA

TYPICAL APPLICATIONS

- Laboratory washing machines including final rinse
- Supply for autoclaves and environmental chambers
- Feed for ultrapure water systems
- Hospital cart and utensil washers
- Buffer preparation
- Photometry
- Spectrophotometry
- Protein electrophoreses
- Media preparation
- Cytological and histological work
- Electrophoreses



Protegra CS® Pro RO EDI system with optional signal light.