

TP-XL (H)

CENTRAL REVERSE OSMOSIS WITH HEAT DISINFECTION



Utilizing a dual-stage configuration, RIVAMED TP-XL (H) ensures high product water quality using municipal water as the feed source. RIVAMED TP-XL (H) is designed in compliance with various international standards and regulations applicable to hemodialysis.

Engineered in full compliance with international hemodialysis standards and regulatory requirements, the TP-XL (H) prioritizes operational safety through its two fully independent RO stages. In the event that one stage becomes inactive, the operator can easily activate the second stage independently via the control panel, thereby ensuring continuous operation. In addition, parallel operation allows the product water capacity to be increased when required.

For heat disinfection of distribution loops and reverse osmosis, TP-XL (H) is equipped with an integrated heat disinfection system, with ultrafiltration available as an optional feature. Its user-friendly interface simplifies configuration and monitoring processes while also enabling easy connectivity and software updates.

Up to 85% Water Recovery & Energy Saving

Ultra-Pure Water with HDF Capability

Integrated Heat Disinfection

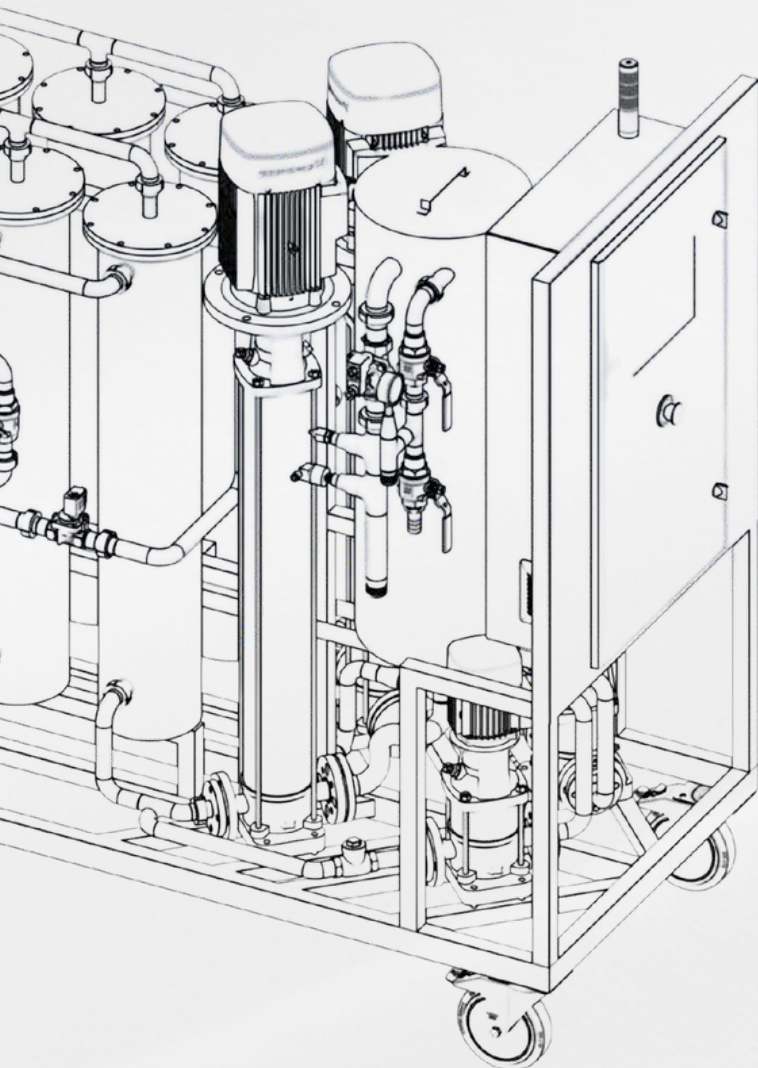
Comprehensive Safety & Protection

Compliance with ISO Standards

- ISO 23500-1:** Addresses guidance for the preparation and quality management of fluids for hemodialysis and related therapies
- ISO 23500-2:** Covers water treatment equipment for hemodialysis applications and related therapies
- ISO 23500-3:** Specifies minimum requirements for water for hemodialysis and related therapies



- Enhanced chemical and microbiological purity through twin-pass operation
- Implementation of water and energy saving technology through product water recirculation, concentrate recovery, and capacity control in accordance with the demand of hemodialysis machines
- Compact and streamlined design providing efficient use of installation space
- Semi-automatic chemical disinfection and fully automatic heat disinfection programs
- Heat sanitizable polyamide membranes
- Integrated permeate pressure holding valve for precise system pressure control
- Continuous monitoring of conductivity, pressure, temperature, product water flow, and concentrate flow for each module
- Programmable multiple independent on/off functions
- Adjustable interval flushing timer programs
- Built-in self-test function activated upon power-up
- Emergency mode in the event of electronic failures
- Monitoring and control via a microprocessor-controlled control panel with a multi-color touchscreen interface
- Remote monitoring and control

**OPTIONAL CONFIGURATIONS**

- Leak Detector
- Ultrafiltration (Bacteria and Endotoxin Filter)

TECHNICAL DATA

PARAMETER

TP-XL (H)

1. PERFORMANCE DATA

Dimensions (W x D x H)	190 x 90 x 180 cm
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Weight	Max 1000 kg
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Permeate Capacity	1000 – 5000 lt/h
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Point of Use (Dialysis Machine)	Up to 104
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Dialysis Water Pressure	2 – 6 bar
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Concentrate Pressure	< 20 bar
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Salt Removal Rate	> 99% NaCl
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System Recovery	Up to 85%
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Bacteria and Endotoxin Removal	> 99%
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Noise Level	< 70 dB (A)
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Heat Disinfection	Integrated
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2. WATER CONNECTIONS

Soft Water Supply	DN 40 hose nozzle
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Permeate	25mm PEX-A Connection
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Wastewater	DN 25 hose nozzle
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3. ELECTRICAL SAFETY

Energy Consumption	Max 18 kW
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Power Plug	CEE 16-32 A
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Supply Voltage	380-400 V AC
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Water Protection Degree	IP44
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Working Mode	Continuous operation
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Leakage Currents	Comply With ANSI/AAMI IEC 60601-1 standard
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Protection Type	I
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Application Part Classification	Type B
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TECHNICAL DATA

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4. FEED WATER

Quality	Softened Tap Water
Hardness	1.78 ppm CaCO ₃ (0.018 mmol/l)
SDI	< 3
Conductivity	< 2000 µS/cm
TDS	< 1200 mg/l
Iron	< 0.1 mg/l
Free Chlorine	< 0.1 mg/l
Temperature Range	5-35 °C
pH Value	6.5-8.5

5. ENVIRONMENTAL CONDITIONS

Shipping / Storage Temperature	+1 to +45 °C
Operating Temperature	+1 to +35 °C
Humidity	Max. 90% relative humidity, non-condensing environment
Installation Altitude	< 2000 m above sea level

6. FIELD REQUIREMENTS

Water Supply	2 – 6 bar dynamic pressure*
Wastewater	HT 100 mm, gravity drainage for 7 m ³ /h**

7. PRE-TREATMENT

Suggested Units

90 µm washable filter, multimedia filter, tandem water softener, activated carbon filter, microfiltration

**Pressure reducing valve or a pressure boosting pump may be required.*

***Maximum 50 cm above floor level.*

