

# PORTABLE REVERSE OSMOSIS SYSTEM

In environments where space and time are critical—such as homes or intensive care units—water treatment systems face unique challenges related to accessibility, reliability, and safety. RIVAMED portable, compact, and low-noise reverse osmosis units are specifically designed to deliver superior performance in settings where space is limited and flexible positioning is essential, while prioritizing optimal performance.

## Compact and Quiet

Quiet operation and space savings thanks to the compact design.

## Extended Equipment Lifetime

Resource efficiency through programmable Start/Stop functions.

## Modular Pre-treatment Design

Customizable according to needs, offering flexible investment options.

## User-Friendly Interface

Easy-to-use, menu-driven, and intuitive control panel.

## Efficient RO Solution

Optimized performance for small hemodialysis units.

## Maximum Hygiene

Microbiological protection through automatic flushing and product water recirculation.

## Hardware-Supported Monitoring

Full documentation of operating data and disinfection processes.

## High-Quality Disinfection

Procedure-guided, accurate, and error-free hygiene processes.

## 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

## OPTIONAL CONFIGURATIONS

- Leak Detector
- Ultrafiltration (Bacteria and Endotoxin Filter)
- Remote Monitoring and Control
- Hardness Analyzer



# TECHNICAL INFRASTRUCTURE

- Enhanced chemical and microbiological purity
- Compact and optimized design ensuring space efficiency
- Semi-automatic chemical and fully automatic thermal disinfection programs
- High-rejection polyamide membrane
- Product water pressure balancing valve for precise system pressure control
- Continuous monitoring of conductivity, pressure, and temperature values
- Programmable, multiple, and independent start/stop functions
- Adjustable interval flushing programs
- Automatic self-test function upon system start-up
- Monitoring and control via a microprocessor-controlled panel
- Software update capability for continuous improvement
- Automatic restart after power failure
- Advanced safety parameters including permeate overpressure, conductivity, overtemperature, dry-run motor protection, and operating history logging
- Buffer tank equipped with level switches for operational convenience
- Dead-leg-free design for maximum hygiene
- Password-protected user access levels
- Visual and audible alarm system
- Braked wheels for easy mobility
- Product water and softened water sampling valves
- Optional Heat Disinfection

OPTIMIZED FOR HOME HEMODIALYSIS

#homedialysis





# TECHNICAL DATA

PARAMETER	RM 100	RO Mini	RO Mini (H)
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## 1. PERFORMANCE DATA

Dimensions (W x D x H)	50 x 80 x 90 cm	26 x 53 x 62 cm	
Weight	75 kg	35 kg	40 kg
Permeate Capacity	< 140 lt/h	70-140 lt/h	
Point of Use (Dialysis Machine)	1-2		
Dialysis Water Pressure	2-6 bar		
Concentrate Pressure	< 13 bar		
Salt Rejection Rate	> 96%		
Bacteria and Endotoxin Removal	> 99%		
System Recovery	< 70%		
Noise Level	< 50 dB (A)		
Heat Disinfection	X	X	✓

## 2. WATER CONNECTIONS

Soft Water Inlet	Hose nozzle DN 20
Product Water	Quick connection DN 6
Wastewater	Hose nozzle DN 8

## 3. ELECTRICAL SAFETY

Mains Plug	CEE 7		
Supply Voltage	220–230 V AC		
Power Consumption	Max 393 W	Max 270 W	Max 1500 W
Water Protection Rating	IP44		
Leakage Currents	Comply with ANSI/AAMI IEC 60601–1 standard		
Applied Part Classification	I		
Protection Type	Type B		

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# TECHNICAL DATA

## PARAMETER

## RM 100

## RO Mini | RO Mini (H)

### 4. FEED WATER

Quality	Tap Water	
Hardness	< 450 ppm	< 270 ppm*
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. AMBIENT 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

Inlet Water Pressure	2 – 6 bar dynamic pressure	
Drainage	Max 50 cm from ground level	

### 7. PRE-TREATMENT OPTIONS

Cartridge Filter	Standard	Optional
Activated Carbon Filter	Standard	Optional
Tandem Water Softening	Standard	Optional
Transport Trolley	Integrated	Optional

\*Water softener is recommended.

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