



# ENVIRO

## Reverse Osmosis Unit

Reverse osmosis is one of the most effective and modern methods of water filtration. This technology can remove up to 99 % of dissolved salts, minerals, and organic impurities. The ENVIRO units utilize high pressure to force water through semi-permeable membranes, effectively separating crystal-clear water (permeate) from concentrated impurities.

The ENVIRO units are built for continuous, worry-free operation, incorporating a 5-micron pre-filter to protect the high-performance membranes and a vertical multistage centrifugal pump for stable water pressure. The units are fully automated via an integrated Control Panel, which monitors water quality in real-time with a built-in conductivity meter and protects the equipment with a low-pressure safety switch and an automatic flush valve.



### ADVANTAGES

- Fully Automated**  
 Intelligent control unit ensures reliable operation with minimal user intervention.
- Cost-Efficient**  
 Designed for low operating costs and high energy efficiency.
- Smart Features**  
 Includes automatic flushing, startup routines, and visual monitoring via an intuitive digital panel.
- Robust Build**  
 Features high-durability FRP membrane housings and an electrostatic-coated steel frame.

### FEED WATER REQUIREMENTS

Parameter	Value	Parameter	Limit / value	Parameter	Limit / value
Recovery Rate	75 %	TDS (Total Dissolved Solids)	< 2 000 ppm	Boron	None
SDI (Silt Density Index)	< 3	Iron (Fe)	< 0.01 mg/l	BOD / COD	None
Nominal Operating Temperature	20 °C	Manganese / Aluminum	< 0.025 mg/l	Bacteriological Pollution	None
Minimum Inlet Pressure	3 bar	Silica	< 20 ppm	Free Chlorine / Oxidants	None
Maximum Operating Pressure	16 bar	Barium / Strontium	Trace amounts only	Hydrocarbons, Oil and Grease	None



FULLY AUTOMATED



COST EFFICIENT



SMART FEATURES



ROBUST BUILD



## APPLICATION-SPECIFIC CUSTOMIZATION

To ensure stable performance across various feed water qualities, the ENVIRO units offer modular enhancements for specific pretreatment and monitoring requirements:

- Chemical Conditioning**

Optional dosing units for Acid, Antiscalant, or Sodium Metabisulfite to manage scaling and oxidation risks in challenging feed water.

- Process Monitoring**

Integrated pH and ORP Control Units for precise, real-time tracking of water chemistry.

- Enhanced Materials**

For applications requiring high-grade corrosion resistance, the system can be equipped with 316 grade stainless steel piping.

## TECHNICAL SPECIFICATION

Unit	Feed (m <sup>3</sup> /h)	Permeate (m <sup>3</sup> /h)	Permeate (m <sup>3</sup> /d)	Drain (l/h)	Installed Power (kW)	Membrane (Pieces/type)
ENVIRO 0.5	0.88	0,5	12	380	1.5	2 / 4040
ENVIRO 1	1.8	1	24	800	1.5	4 / 4040
ENVIRO 2	3.3	2	48	1 300	3	2 / 8040
ENVIRO 4	5.7	4	96	1 700	4	4 / 8040
ENVIRO 6	8.6	6	144	2 600	4	6 / 8040
ENVIRO 8	11.4	8	192	3 400	5.5	8 / 8040
ENVIRO 10	13.3	10	240	3 300	7.5	10 / 8040

## ENVIRO UNIT DIMENSIONS

Unit	Dimensions W × D × H (mm)
ENVIRO 0.5	600 × 600 × 1 588
ENVIRO 2	2 200 × 800 × 1 800
ENVIRO 4	3 800 × 700 × 1 795
ENVIRO 6	3 800 × 700 × 1 795
ENVIRO 8	5 000 × 900 × 1 767
ENVIRO 10	6 000 × 900 × 1 767

