



ENDOTHERM MINI COMPACT SIMPLEX RO SYSTEM US DATA SHEET



Compact, reliable, cost effective simplex reverse osmosis water purification solutions for endoscopy and sterile processing applications.

Envirogen's EndoTherm range stands out in the market for its unique advantages, leveraging over 15 years of R&D experience in UK healthcare:

- **Unrivalled Compliance with a guarantee:** EndoTherm is the only proven product known to exceed the AAMI ST108 standard and includes a performance guarantee.
- **Smallest footprint in the industry:** Advantageous for facilities with limited space.
- **Robust case studies and comprehensive list of reference sites:** Demonstrating proven effectiveness and reliability.

The EndoTherm Mini is a small footprint, simplex system, with a single reverse osmosis (RO) stream that delivers purified water to exceed AAMI ST108 standards. EndoTherm Mini units can be programmed for thermal sanitization to take place after hours. A combination of reverse osmosis, ultra-violet disinfection, sub-micron filtration and constant recirculation all work together to maintain good water quality at a range of dispense rates making it suitable for individual or multiple pieces of decontamination equipment.

The full color HMI (human machine interface) touch-screen monitor allows for secure PIN protected access levels, simple maintenance procedures and displays real-time graphical data. All models are pre-fabricated inside a small footprint cabinet, making them fast and easy to install, commission and validate. Various service contract options are available as well as remote digital monitoring access.

FEATURES & BENEFITS

- Ideal for single or multiple washers/autoclaves
- Steam heating option available
- Simplex high-efficiency RO system
- Prefabricated, skid mounted modular system means quick installation and less downtime
- Thermal sanitization to >176°F (>80°C) automatically
- Water can recirculate at ambient or elevated temperatures to all points of use
- Designed to comply with AAMI ST108 requirements
- Choice of high dispense rates for rapid filling and shorter cycles
- Distribution loops available in orbitally welded stainless steel or PEX pipework
- High capacity stainless steel tank to buffer demand to multiple washers
- Hygienic sample valve with easy access to validate and verify product water quality
- Expandable with upgradeable outputs
- PLC controller with full color touch screen HMI for easy system programming
- Removable USB memory stick for data logging system performance and sanitizations
- Remote monitoring options available
- Includes performance guarantees and options for service maintenance and support.

TECHNICAL SPECIFICATION

Treated Water Specification - All models

| | |
|--------------|--------------|
| Conductivity | <10 µS/cm* |
| Bacteria | <1 CFU/100ml |
| Endotoxin | <0.25 EU/ml |
| Particles | <0.2 µm |

*Conductivity of <10µS when deionization (DI) cylinders option is selected

Feed Water Quality - All models

| | |
|----------------------------------|-------------------------|
| Hardness (CaCO ³) | <50 mg/l |
| Free Chlorine (Cl ²) | <0.4 mg/l |
| Iron/Manganese (Fe/Mn) | <0.05 mg/l |
| Feedwater Pressure | 35-90 psi (2.5-6.0 bar) |
| Max Conductivity | <1400 µS/cm |
| Silica (SiO ²) | <30 mg/l |

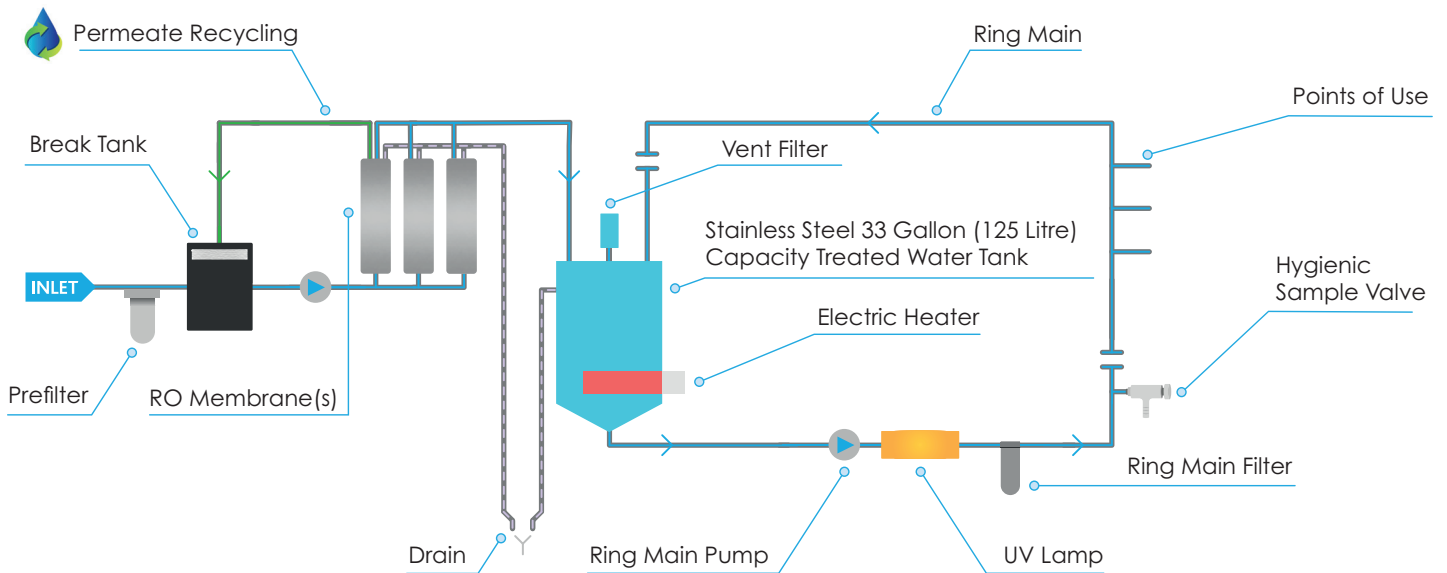


An EndoTherm Mini simplex RO System



Remote wall-mounted alarm indicator

SYSTEM FLOW DIAGRAM



US EndoTherm Mini

PRODUCT SPECIFICATION

| EndoTherm Mini Model | | ETM-150 | ETM-300 | ETM-500 | ETM-900 |
|----------------------------------|-------------|--|----------|-----------|--------------------------------------|
| Production Rate @ 15°C | gph (l/hr) | 39 (150) | 79 (300) | 132 (500) | 237 (900) |
| Max Dispense Rate | gpm (l/pm) | 15.8 (60) | | | 21.7 (120) |
| Max RO Recovery Rate | % | 75 | | | |
| Dimensions: Depth | inches (mm) | 25 (625) | | | 42 (1050) |
| Dimensions: Width | inches (mm) | 22 (550) | | | 26 (650) |
| Dimensions: Height | inches (mm) | 78 (1980) | | | |
| Shipping Weight | lbs (kg) | 368 (175) | | 408 (185) | 496 (225) |
| Inlet Connection | NPT | 3/4" | | | |
| Drainage Connection | - | Minimum 1.25" (32 mm) upstand to drain | | | |
| Ringmain Connection | NPT | 1" | | | |
| Electrical Supply | - | 4.5kW Heater - 240VAC center tapped, 35A, 60Hz (+120VAC / Gnd / -120VAC) | | | 12kW Heater - 3ph, 480VAC, 60Hz, 35A |
| Max Power Consumption | kW | 7.1 | | | 22 |
| Noise Level during Recirculation | dB | <50 | | | |

ABOUT ENVIROGEN

Envirogen is a leading international provider of water and wastewater treatment solutions. We solve complex challenges relating to water availability and quality, and help our customers to increase productivity, reduce costs and meet environmental and sustainability targets.

We do this through offering:

- Best in class water and wastewater treatment and process filtration technology
- Expertise in design, project management and engineering
- World class manufacturing and servicing capability



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