



# ENDOTHERM DUO

## COMPACT DUPLEX RO SYSTEM

### DATA SHEET



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

The EndoTherm Duo is a range of duplex reverse osmosis (RO) systems that are designed to meet the water quality standards of HTM01-06, HTM01-01, ISO15883 and AS/NZ 4187.

EndoTherm Duo units can be set to operate at ambient or elevated temperatures (user adjustable) with automatic thermal sanitisation taking place out of hours. All models can be electric or steam heated. 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 that can be matched to single or multiple decontamination equipment needs.

The full colour HMI (human machine interface) touch-screen monitor allows for secure access levels, simple maintenance procedures and displays real-time graphical data. Compact, pre-assembled and skid mounted, EndoTherm Duo units are fast and easy to install, commission and validate. Various service contract options are available as well as access to our remote digital monitoring programs.

## FEATURES & BENEFITS

- Ideal for single or multiple washers/autoclaves
- Steam heating option available
- Duplex high-efficiency RO systems on the same module for maximum resilience
- Prefabricated, skid mounted modular system means quick installation and less downtime
- Thermal sanitisation to >80°C automatically out of hours
- Water can recirculate at ambient or elevated temperatures to all points of use
- Designed to comply with HTM01-06, HTM01-01, ISO15883, EN285 and AS/NZ 4187 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
- Upgradeable outputs up to 1200 lph to help future proof
- PLC controller with full colour, touch screen HMI for easy system programming
- Removable USB memory stick for data logging system performance and sanitisations
- Twin pass option available
- Remote monitoring options available
- Comprehensive after sales service and support backed up by national network of fully trained engineers

## TECHNICAL SPECIFICATION

### Treated Water Specification - All models

Conductivity	<30 $\mu\text{S}/\text{cm}$
Bacteria	<1 CFU/100ml
Endotoxin	<0.25 EU/ml
Particles	<0.2 $\mu\text{m}$

### Feed Water Quality - All models

Hardness ( $\text{CaCO}_3$ )	<50 mg/l
Free Chlorine ( $\text{Cl}_2$ )	<0.4 mg/l
Fouling Index (SDI)	<10
Iron/Manganese (Fe/Mn)	<0.05 mg/l
Temperature	<20°C
Feedwater Pressure	2.5-6.0 bar
Max Conductivity	<1400 $\mu\text{S}/\text{cm}$
Silica ( $\text{SiO}_2$ )	<30 mg/l

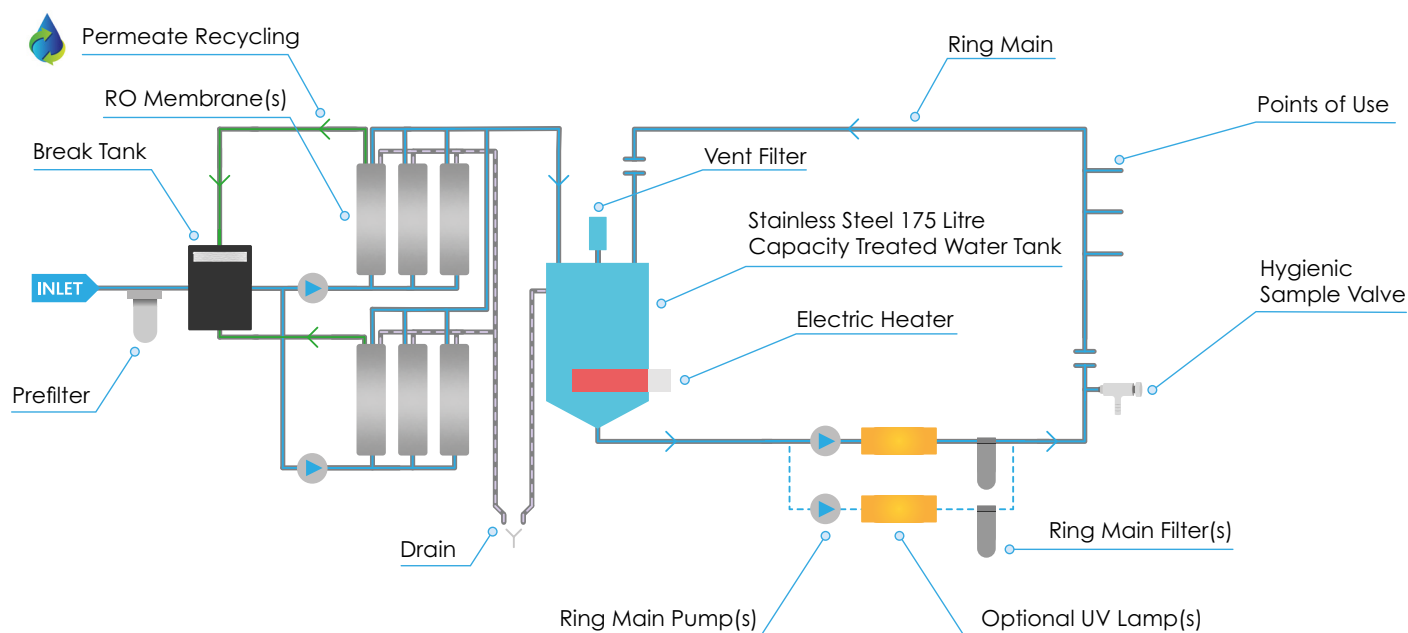


An EndoTherm Duo duplex RO System



Remote wall-mounted alarm indicator

## SYSTEM FLOW DIAGRAM



## PRODUCT SPECIFICATION

EndoTherm Duo Model		ETD-300	ETD-600	ETD-900	ETD-1200
Production Rate @ 15°C	l/hr	300	600	900	1200
Max Dispense Rate	l/pm	Up to 120			
Max RO Recovery Rate	%	75			
Dimensions: Depth	mm	830			
Dimensions: Width	mm	1360			
Dimensions: Height	mm	1840			
Shipping Weight	Kg	330	350	372	395
Inlet Connection	BSP	1"			
Drainage Connection	min 32mm	Upstand to drain			
Ringmain Connection	inches IDF	1"			
Electrical Supply	-	3ph, 415V, 32A			
Max Power Consumption	kW	19			
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
- Market-leading manufacturing and servicing capabilities



### UK HEADQUARTERS

Envirogen Group  
Unit 9, Wimsey Way, Alfreton Trading Estate  
Alfreton, Derbyshire, DE55 4LS  
T: +44 (0) 1773 441029  
E: [enquiries@envirogengroup.com](mailto:enquiries@envirogengroup.com)

### EUROPEAN HEADQUARTERS

Envirogen Technologies bv  
Penningweg 71, 1507 DG Zaandam, The Netherlands  
T: +31 75 204 7200  
E: [NLinfo@envirogengroup.com](mailto:NLinfo@envirogengroup.com)

### NORTH AMERICAN HEADQUARTERS

Envirogen Technologies  
2627 Chestnut Ridge Road, Suite 200  
Kingwood, TX 7733  
T: 713.979.9142  
E: [info@envirogen.com](mailto:info@envirogen.com)

We have a network of regional sales and service teams worldwide:

**UK and Europe:** UK, The Netherlands, Germany, France, Italy.

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For further details, visit our website or contact our main office locations above.

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