

LABPURE DATA SHEET



The Envirogen LabPure is an energy efficient skid-mounted reverse osmosis, CO<sub>2</sub> degasser, electro-deionisation water treatment plant. It's compact design delivers small volume, high purity water requirements.

This compact multi-technology solution is designed to provide 150 to 1000 I/hr flow rates of high purity water for central laboratories, research and development, pharmaceutical, electronics and general manufacturing applications. LabPure incorporates a three-stage, chemical-free process, including reverse osmosis (RO) technology followed by degas membrane contactors for CO<sub>2</sub> removal, and electro-deionisation (EDI) system treatment.



## **FEATURES & BENEFITS**

- Continuous operation, chemical free generation of ultra-pure water
- Inlet carbon filter to reduce chlorine levels and particulates
- Integral type AB air gap raw water break tank
- High efficiency, low energy RO membranes with water rejection rates of up to 96-98%
- Degas membrane contactors for CO2 removal for improved process efficiency
- High flow rate EDI module to reduce plant foot print
- Bespoke EDI controller to ensure EDI stack is monitored and operated efficiently
- PLC & HMI control system for intelligent monitoring and operation
- System incorporates high quality instrumentation package
- · Compact pre-packaged, skid-mounted system minimises installation, commissioning, start-up time
- Service and maintenance with access to a network of nationwide after-sales support teams
- Remote monitoring with trending capabilities and SMS/email messages.

## **ADDITIONAL FEATURES**

• Treated water tank and distribution skids available.

# **TECHNICAL SPECIFICATION**

Model		150	250	500	750	1000
Nominal Permeate Performance*	l/h	150	250	500	750	1000
Rejection Rate (Nom)**	%	96-98				
System Inlet Pressure (Min/Max)	Bar (Psi)	1.5-6 (21.8-87)				
Ambient Temperature	°C (°F)	5-35 (41-95)				
RO Membrane	Num	2	2	2	3	4
Degasser Membrane Contactor	Num	1	1	1	1	2
EDI Module	Num	1	1	1	1	1
Feed Water Inlet (Flange)	DN (Inch)		15 (0	0.50)		20 (0.75)
Permeate Outlet (Flange)	DN (Inch)	20 (0.75)				
Concentrate Outlet (Flange)	DN (Inch)	20 (0.75)				
Tank Overflow	DN (Inch)	32 (1.25)				
Length	mm (Inch)		770 (30.3)		9001	(35.4)
Width	mm (Inch)		720 (28.3)		9001	(35.4)
Height	mm (Inch)	1840 (72.4)				
Weight (Dry) (approx.)	lbs (Kg)	300 (661)	300 (661)	400 (882)	450 (992)	500 (1102)
Electrical Supply	V/ph/Hz	415/3/50				
Fuse Rating	Α	20	20	32	32	32
Power Consumption	kW / A	7.5 / 11	7.5 / 11	17 / 25	20 / 29	20 / 29
Protection Class	IP			54		

<sup>\*</sup> For water quality of 10°C, 3.0 Bar. TD\$  $\leq$  500mg/l  $\pm$  15%., \$DI  $\leq$  3.0, oxidants  $\leq$  0.5 mg/l.

# PERFORMANCE SPECIFICATION

Inorganics	1 TO >15 MΩ-CM AT 25°C (75°F)
TOC	<50 ppb
Bacteria	<1 CFU/ml
Particles	0.2 µm filter
рН	Effectively neutral

<sup>\*\*</sup> Based on water quality of TDS  $\leq$  500 mg/l, with softening as a pre-treatment.

 $<sup>^{\</sup>scriptscriptstyle \rm I}$  Length and width subject to change due to continued improvement.

## **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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