# Series S – 2,000 to 132,000 GPD Seawater Desalination Systems



Designed to convert seawater to drinking water, these systems use high quality reverse osmosis seawater desalination membranes. The product water is used in a variety of areas including municipal, hotels, resorts, military, off-shore platforms, and various industrial applications. Designed for the demanding requirements of the marine environment, these systems use our proven technology to give reliable performance.



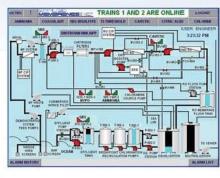
### **Key Features**

- 38 years of experience is reflected in our quality
- Heavy duty powder coated frame
- Proven components are used throughout the system
- PLC Controlled Operation
- Energy recovery included for models S-128F and larger
- Conservatively engineered for reliable long-term performance
- Factory tested to ensure trouble-free operation

























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#### **Standard Equipment**

- Thin Film Composite Membranes
- Stainless steel high pressure pump
- Pressure relief
- Energy recovery for models S-128F and up
- Programmable logic controller (PLC) models S-128F and up
- FRP pressure vessels
- Polypropylene 5M filter housing for up to S-48B FRP housing for larger models
- 316SS high pressure piping and Sch. 80 PVC low pressure piping
- Motorized automatic inlet feed valve
- Antiscalant injection system
- Panel mounted SS flow control valve
- Automatic membrane feed flush with permeate
- Doubles as a clean-in-place system
- Low inlet and high outlet pressure switches
- 4) Panel mounted liquid filled pressure gauges: Filter in/out, pump, concentrate
- Panel mounted flowmeters: product & concentrate
- Product TDS with digital display readout
- Cleaning ports
- System on/off with 2-level tank floats
- Heavy duty powder coated aluminum frame

#### Microprocessor/PLC Controller for Automatic Operation

#### **Monitors and/or Controls:**

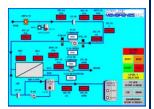
- Inlet valve
- Delayed start-up of high pressure pump
- Permeate water flush at system shut-down
- Low pressure and high pressure switches
- On/Off with storage tank level
- Pre-treatment backwash/lockout
- Permeate TDS
- Feed TDS) and percent rejection
- Water Temperature
- Operating hours
- RO tank full override
- Auxiliary pump or valve control (optional)

#### **Controller Features:**

- Backlit LED Display or optional Touchscreen
- Multi-function keypad or optional Touchscreen
- Alarm notification
- Programmable time delays, set-points and flush mode
- Visual indicator alarm light
- Low pressure automatic restart



I-ROC150S Controller



PLC Controller

#### **Optional Equipment**

- Stainless steel boost or repressurization pump
- pH monitor for feed or for permeate
- Chemical injection

- Pre-treatment
- ORP monitor/controller
- Turbidity monitor
- UV system, feed or permeate
- Energy recovery (S98C and smaller)
- PLC with 10" Touchscreen

#### **Ordering Information**

Model No.	System Capacity			Membrane Elements		Line Sizes (NPT, Inches)			System Dimensions (in/cm)			Approx. Shipping
	GPM	GPD	m³/day	Qty.	Size (Dia.×L)	Inlet	Perm.	Conc.	Length	Depth	Height	Weight (Lb/Kg)
S-24A	1.5	2,000	6	2	4 × 40	3/4	3/4	3/4	100/254	36/92	72/183	1200/545
S-34A	2	3,000	11	3	4 × 40	3/4	3/4	3/4	100/254	36/92	72/183	1285/585
S-44A	3	4,000	15	4	4 × 40	11/2	3/4	1½	100/254	36/92	72/183	1375/625
S-64B	4	6,000	23	6	4 × 40	11/2	3/4	1½	134/340	36/92	72/183	1685/765
S-28B	5	7,200	27	2	8 × 40	11/2	3/4	1½	134/340	44/112	72/183	1805/820
S-38A	8	11,520	44	3	8 × 40	2	3/4	2	134/340	44/112	72/183	3550/1610
S-48B	10	14,400	55	4	8 × 40	2	1	2	134/340	44/112	72/183	3790/1720
S-68B	15	21,600	82	6	8 × 40	2	1½	2	134/340	44/112	72/183	4070/1845
S-98C	24	34,560	130	9	8 × 40	3	1½	3	174/442	44/112	72/183	5760/2651
S-128F	32	46,080	174	12	8 × 40	3	2	3	300/762	44/112	72/183	7330/3325
S-188F	47	67,680	256	18	8 × 40	6	21/2	6	300/762	44/112	72/183	9475/1575
S-248F	63	90,720	343	24	8 × 40	6	21/2	6	300/762	44/112	72/183	12010/5445
S-308F	80	115,200	436	30	8 × 40	6	3	6	300/762	44/112	72/183	13950/6330

#### Notes and Voltage/ Ordering Information

- All dimensions and weights are approximate.
- Based on 35,000 ppm seawater at 77°F (25°C). Recovery in the range of 10-40% depending on the system size.
- Operating pressure 800-1000 psi (57-71 kg/cm²).
- Seawater intake and supply pump to bring water to the system are not included. Beach well intake recommended.

  Please add our voltage codes to the end of the model number when ordering: Example: S-14A-236 = 220/230v / 3 ph / 60 hz

Voltage Codes:

- **236** = 220 or 230v/ 3ph/ 60hz
- **436** = 460 or 480v/3ph/60 Hz

• **235** = 220v/3ph/50hz

• **335** = 380v/3ph/50 Hz Single Phase Not Available













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