

# GENERON

## MARINE N<sub>2</sub> GENERATING SYSTEMS MEMBRANE Single Cabinet Series

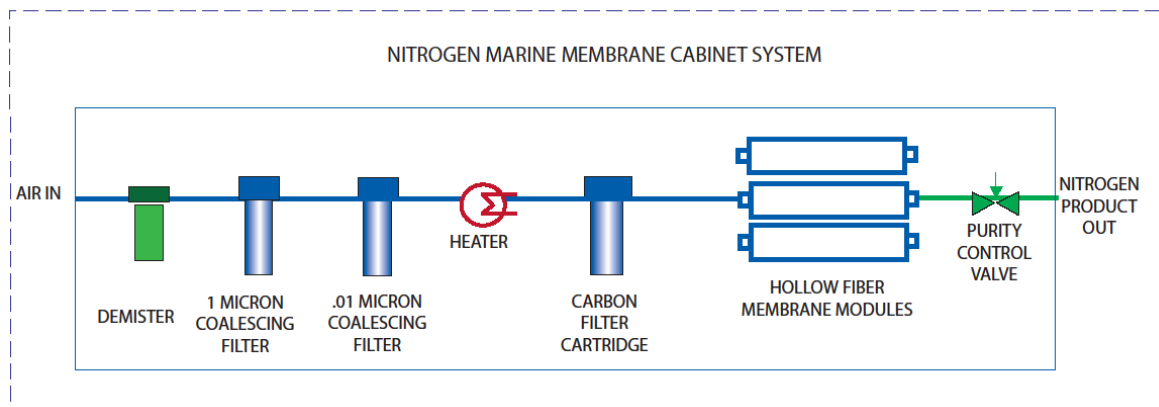
- Cargo Hold and Hull Fumigation
- Cargo Hold Inerting / Oxidation Control
- FPSO (Floating Production, Storage & Offloading Systems)
- LNG / LPG
- Transporting Perishable Goods
- Inerting of Flammable Liquids



The **GENERON**<sup>®</sup> Marine Series is ideal where low to medium Nitrogen flow rates are required in a small footprint. **GENERON**<sup>®</sup> Cabinet Series is designed and manufactured using the patented **GENERON**<sup>®</sup> Hollow Fiber Membranes. These highly engineered systems produce high flow rates in a range of cabinet designs and sizes with an average 30% smaller footprint.

The **GENERON**<sup>®</sup> membrane module contains over a million fibers. Compressed feed air is passed down the bores of the fibers at one end of the module with enriched nitrogen product gas exiting from the opposing end. Oxygen and water vapor are selectively removed and vented from the feed air as it flows to the other end of the module.

Our ISO 9000, ASME, PED, UL/CSA and GOST certified facilities and shops ensure the highest-standards are met and your expectations exceeded.



### FEATURING:

- **Convenient:** Fully Automatic Unattended Operation
- **Easy:** Maintenance and operation
- **Economical:** Low Operating Cost
- **Reliable:** Systems Built to Last
- **Safe:** Low Operating Pressures, no Hazardous Storage
- Hydrocarbon free
- Nitrogen Dew Point down to  $-70^{\circ}\text{F}$  ( $57^{\circ}\text{C}$ )
- Nitrogen purities up to 99.999%
- Optional Dew Point feature of  $-100^{\circ}\text{F}$  ( $-73^{\circ}\text{C}$ )
- Oxygen Analyzer
- **DNV Approved Cabinets**



# MARINE N<sub>2</sub> MEMBRANE SYSTEMS

## Single Cabinet Series

NITROGEN OUTPUT FLOW RATE—4000 Series Cabinets				
All flow rates are rated at 95% Purity				
	4001		4002	
Pressure PSIG / BAR G	Nitrogen Flow SCFM / Nm3/hr	Air Demand SCFM / Nm3/hr	Nitrogen Flow SCFM / Nm3/hr	Air Demand SCFM / Nm3/hr
<b>100 / 6.9</b>	11 / 17	23 / 37	21 / 34	47 / 74
<b>150 / 10.3</b>	19 / 30	40 / 62	38 / 60	76 / 120
<b>175 / 12.0</b>	23 / 36	46 / 73	46 / 72	92 / 144

NITROGEN OUTPUT FLOW RATE—6000 Single & Dual Cabinets				
All flow rates are rated at 95% Purity				
	6001-4		6005-8	
Pressure PSIG / BAR G	Nitrogen Flow SCFM / Nm3/hr	Air Demand SCFM / Nm3/hr	Nitrogen Flow SCFM / Nm3/hr	Air Demand SCFM / Nm3/hr
<b>100 / 6.9</b>	140 / 220	312 / 490	280 / 440	625 / 980
<b>150 / 10.3</b>	254 / 400	535 / 840	510 / 800	1070 / 1680
<b>175 / 12.0</b>	303 / 477	630 / 990	607 / 954	1261 / 1980

\*\*Flow rates at standard atmospheric conditions (77°F and 14.7 psi.)

\*\*\*Dew point at < -85°F Additional purities and flows available.

Approximate Weight and Dimensions				
Size	L inch / mm	W inch / mm	H Inch / mm	Weight lbs. / kg
4000 Series	30 / 762	28 / 711	66 / 1676	250 / 112
6000 Series	32 / 812	32 / 812	90 / 2286	800 / 360
6000 Dual	64 / 1625	32 / 812	90 / 2286	1200 / 540

### Standard Components

- Heater
- Hollow Fiber Membranes
- NEMA 12 Cabinet Enclosure
- Purity Control Valve
- Selector Valve
- Pressure Gauges
- .01 Micron Coalescing Filter

### Options

- Demister
- 1 Micron Coalescing Filter
- Carbon Filter Cartridge
- Oxygen Analyzer (Zirconium Oxide)
- Dew Point Analyzer
- NEMA 4X Cabinet Enclosure
- NEMA 4X (316 Stainless Steel)
- Fail Safe Package (off-spec nitrogen automatically vented to atmosphere\*)
- Enhanced PLC with Telemetry
- Hazardous Area Classifications
- Product Booster Compression Package for high pressure applications
- Product Flow Meter
- PLC Control System
- Primary Compression (Compressor)
- **DNV Type Approved**



### GENERON

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