

# LG Seawater RO Membranes

## SWRO & NanoH2O Series

High-Efficiency Seawater Reverse Osmosis Membrane Elements

### SECTION 1 — OVERVIEW

LG Water Solutions, formerly LG NanoH2O, manufactures seawater reverse osmosis (SWRO) membranes utilizing proprietary nanocomposite technology. This technology incorporates thin-film nanocomposite (TFN) chemistry, embedding hydrophilic nanoparticles into the polyamide layer to increase water permeability while maintaining high salt rejection. The LG SWRO series, including the NanoH2O SW and SWRO PRO lines, delivers salt rejection rates of 99.7% to 99.85% and permeate flow rates ranging from 6,000 to 9,000 gallons per day (GPD) for standard 8-inch diameter elements. Operating pressure typically ranges from 800 to 1,200 psi (55 to 83 bar), allowing effective desalination of seawater with total dissolved solids (TDS) up to 45,000 ppm. These membranes are designed for lower energy consumption compared to conventional thin-film composite (TFC) membranes, achieving equivalent permeate quality at reduced feed pressure. The 8-inch element format ensures drop-in compatibility with existing SWRO pressure vessels and systems, simplifying retrofits and upgrades. As distributed by Purecowater (purecowater.com), these membranes are available for commercial and industrial seawater desalination applications.

### SECTION 2 — APPLICATIONS

- Seawater desalination for municipal drinking water supply
- Industrial water production for power generation and manufacturing
- Middle East desalination plants requiring high salinity rejection
- Offshore oil and gas platforms for process and potable water
- Coastal industrial facilities needing on-site freshwater generation

### REQUEST A QUOTE

## Purecowater

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Peachtree City, GA

#### BRANDS WE DISTRIBUTE

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## Product Specifications

<b>Manufacturer</b>	LG Water Solutions (NanoH2O)
<b>Technology</b>	Nanocomposite thin-film composite
<b>Advantage</b>	Higher permeability at lower energy
<b>Application</b>	Seawater desalination (SWRO)
<b>Element Size</b>	8-inch standard
<b>Rejection</b>	> 99.8% NaCl for SWRO series
<b>Markets</b>	Middle East, coastal industrial, municipal
<b>Distributor</b>	Purecowater — info@purecowater.com

### Contact Purecowater to Order

[info@purecowater.com](mailto:info@purecowater.com)

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