

## N1 – Series Reverse Osmosis Systems

**AXEON N1 – Series Reverse Osmosis Systems** are designed as a competitive solution for capacities ranging from 2,000 – 10,000 gallons per day. Ideal for water purification of private residences, restaurants, cafes, car washes, hydroponics, misting and more.

### Benefits

- In Stock for Immediate Delivery
- Compact Design
- Instrumentation Easily Accessible
- Pre-Plumbed, Wired and Assembled
- Easy Maintenance and Servicing
- Low Operation and Maintenance Costs
- Individually Tested
- 1-Year Limited Warranty

### Standard Features

- AXEON AX-5000 Computer Controller
- AXEON Permeate Flow Meter
- AXEON Concentrate Flow Meter with Stainless Steel Needle Valve
- AXEON Concentrate Recycle Flow Meter with Stainless Steel Needle Valve
- AXEON Pre-Filter 0 – 100 psi Panel Mounted Glycerin Filled Gauges
- AXEON Pump Discharge 0 – 300 psi Panel Mounted Glycerin Filled Gauges
- Conductivity Sensor
- Chemical Injection Port and Electrical Connection
- AXEON HF4 – Series Membrane Elements



**N1 – 10000**  
Reverse Osmosis System

- AXEON FRP – Series Membrane Housings – 300 psi
- AXEON by Pentek® Big Grey Filter Housings
- 4.5" Diameter 5-Micron Sediment Pre-Filter
- Grundfos® Multi-Stage Stainless Steel Booster Pump
- Composite Feed Solenoid Valve
- Feed Low Pressure Switch
- Black Powder Coated Steel Frame
- High Pressure Tank Switch
- Permeate Sample Valve (N1 – 8000, N1 – 10000)
- Wooden Shipping Crate
- Push/Pull Fittings

Know Higher Standards™

# AXEON N1 – Series Reverse Osmosis Systems

Product Specifications				
Models	N1 – 2000	N1 – 4000	N1 – 8000	N1 – 10000
<b>Design</b>				
Configuration	Single Pass	Single Pass	Single Pass	Single Pass
Feedwater TDS max (ppm) <sup>†</sup>	2,000	2,000	2,000	2,000
Standard Recovery %	32	48	65	58
<b>Rejection and Flow Rates<sup>†††</sup></b>				
Permeate Flow Rate (gpd / lpd)	2,000 / 7,570	4,000 / 15,141	8,000 / 30,283	10,000 / 37,854
Permeate Flow Rate (gpm / lpm)	1.40 / 5.26	2.80 / 10.60	5.60 / 21.20	8.30 / 31.42
Minimum Concentrate Flow Rate (gpm / lpm)	3 / 11.35	3 / 11.35	3 / 11.35	6 / 22.71
Concentrate Recycle Flow Rate (gpm / lpm)	Up to 2 / 7.57	Up to 5 / 18.93	Up to 5 / 18.93	Up to 5 / 18.93
<b>Connections</b>				
Feed Connection (in)	1 FNPT	1 FNPT	1 FNPT	1 FNPT
Permeate Connection (in)	1/2 QC	1/2 QC	1/2 QC	1 FNPT
Concentrate Connection (in)	1/2 QC	1/2 QC	1/2 QC	1 FNPT
<b>Membranes</b>				
Membrane(s) Per Vessel	1	1	1	1
Membrane Quantity	1	2	4	6
Membrane Size	4040	4040	4040	4040
Nominal TDS Rejection %	98	98	98	98
<b>Vessels</b>				
Vessel Array	1	1:1	1:1:1:1	2:2:2
Vessel Quantity	1	2	4	6
<b>Pumps</b>				
Pump Type	Multi-Stage	Multi-Stage	Multi-Stage	Multi-Stage
Motor HP	1	1	2	2
RPM at 60 Hz	3480	3480	3480	3480
<b>System Electrical</b>				
Standard Voltage + Amp Draw	220V, 60Hz, 1PH, 8A**	220V, 60Hz, 1PH, 8A**	220V, 60Hz, 1PH, 11A**	220V, 60Hz, 1PH, 11A**
<b>System Dimensions</b>				
Approximate Dimensions* L x W x H (in / cm)	15 x 21 x 56 / 38 x 53 x 142	15 x 21 x 56 / 38 x 53 x 142	23 x 28 x 56 / 58 x 71 x 142	23 x 35 x 57 / 58 x 89 x 145
Approximate Weight (lbs / kg)	110 / 49.9	120 / 54.4	190 / 86.2	220 / 99.8

**Test Parameters:** 550 TDS Filtered (5 – Micron), Dechlorinated, Municipal Feedwater, 65 psi / 4.50 bar Feed Pressure, 100 psi / 6.9 bar Operating Pressure, 77°F / 25°C, Recovery as stated, 7.0 pH. Data taken after 60 minutes of operation.

\* Does not include operating space requirements.

\*\* Varies with motor manufacturer.

## Operating Limits<sup>††</sup>

Maximum Feed Temperature (°F / °C)	85 / 29	Maximum Free Chlorine (ppm)	0
Minimum Feed Temperature (°F / °C)	40 / 4	Maximum TDS (ppm)	2,000
Maximum Ambient Temperature (°F / °C)	120 / 49	Maximum Hardness (gpg)	0
Minimum Ambient Temperature (°F / °C)	40 / 4	Maximum pH (Continuous)	11
Maximum Feed Pressure (psi / bar)	85 / 6	Minimum pH (Continuous)	2
Minimum Feed Pressure (psi / bar)	45 / 3	Maximum pH (Cleaning 30 Minutes)	13
Maximum Pressure (psi / bar)	200 / 14	Minimum pH (Cleaning 30 Minutes)	1
Maximum Feed Silt Density Index (SDI)	<3	Maximum Turbidity NTU	1

<sup>†</sup> Low temperatures and feedwater quality, such as high TDS levels will significantly affect the systems production capabilities and performance. Computer projections must be run for individual applications which do not meet or exceed minimum and maximum operating limits for such conditions.

<sup>††</sup> System pressure is variable due to water conditions. Permeate flow will increase at a higher temperature and will decrease at a lower temperature.

<sup>†††</sup> Product flow and maximum recovery rates are based on feedwater conditions as stated above. Do not exceed recommended permeate flow. Design conditions are not identical to test conditions, please contact the manufacturer or your supplier for more information.

