

STANDARD RO SYSTEM

800GPD / 1500GPD/ 3000GPD

Standard Features

- Carbon steel powder coated frame: midnight black/pure white or Stainless Steel frame
- 10" 5um pre-filter for 800gpd; 20" 5um pre-filter for 1500/3000gpd
- Seamless SS or FRP RO housing
- Permeate/concentrate flow meter
- Liquid filled pressure gauge x3
- Feed/ pump/ concentrate pressure gauges
- Membrane flush on/off switch
- Rotary vane pump for 800gpd; SS multistage pump for 1500/3000gpd
- High-pressure material tubing
- Low inlet pressure protection design
- Automatic feed water solenoid valve
- Automatic flushing solenoid valve
- Adjustable flow regulation valve
- Permeate Cond./ Resis./ TDS monitor
- Automatic inlet shutoff valve
- Recirculation system to increase the recovery rate and waste less water
- Chemical feed open for flexibility
- Custom design is available; please contact us for more info

Feed Water

- Feed Water Source: Standard RO pretreatment
- Min. raw water pressure: 40psi (2.8kg/cm²)
- Min. feed water flow:
 - 800gpd: 4gpm (0.85 m³/h)
 - 1500gpd: 7gpm (1.50 m³/h)
 - 3000gpd: 8gpm (1.70 m³/h)
- Water temperature: 15 - 38°C (60 - 100°F)
- pH: 4 - 9
- Hardness: < 17 ppm (CaCO₃)
- Turbidity: < 1 NTU
- Silt Density Index: SDI < 5
- Total Dissolved Solids: TDS <1000 ppm
- Fe³⁺: < 0.1 ppm
- Cl⁻: must be removed
- Mn: < 0.05 ppm
- H₂S: < 0.05 ppm
- Silica: < 100 ppm (concentrate flow)
- Organic: < 1 ppm



Physical Spec

Model	ORO-800	ORO-1500	ORO-3000
Permeate (per day)	800 Gallons (3 m ³)	1500 Gallons (5.7 m ³)	3000 Gallons (11.35 m ³)
RO housing	1	1	2
Operating Pressure	150psi or 200psi	150psi or 200psi	150psi or 200psi
Piping (inlet)	3/4"	3/4"	3/4"
Recovery (%)	15 - 20	15 - 20	30 - 40
Power (Voltage / Frequency)	110 or 220v, 50 or 60hz	110 or 220v, 50 or 60hz	110 or 220v, 50 or 60hz
Output	1.5 kw (2.0 hp)	1.5 kw (2.0 hp)	1.5 or 2.2 kw (2.0 or 3.0 hp)
System Dimension L x W x H (cm/inch)	45 x 45 x 120 / 18" x 18" x 47"	55 x 55 x 142 / 22" x 22" x 56"	55 x 55 x 142 / 22" x 22" x 56"
Package Dimension L x W x H (cm/inch)	58 x 58 x 138 / 23" x 23" x 54"	69 x 69 x 158 / 27" x 27" x 62"	69 x 69 x 158 / 27" x 27" x 62"
Shipping Weight	75 kg (165 lbs)	130 kg (290 lbs)	150 kg (330 lbs)

- * RO membrane not included; membranes can be added upon request
- * ORO-800 system comes with 4"x21" membranes
- * Recirculation system is available in both ORO-1500 and 3000 series to increase the recovery rate

* It is not recommended to set the recovery rate higher than the listed recovery. Flow rates are determined by the original membrane manufacturer's testing condition of NaCl solution, 25 °C / 77 °F temperature, 225psi for standard brackish water RO, 150psi for low pressure RO, 100 - 110psi for ultra-low pressure RO at 10-15% recovery. Rejection rate of the membrane is under normal test condition defined by membrane manufacturer, and the actual flow rates performance vary based on the inlet water condition (pretreatment design), including the temperature, the pressure, and the model of the membrane. A report of feed water analysis is suggested to determine if the inlet water meets the criteria of our RO system.

STANDARD RO SYSTEM

6000PD / 9000GPD/ 13000GPD

Standard Features

- Powder-coated carbon steel frame
- Midnight black or pure white
- 10" 5um pre-filter for 6000gpd;
20" 5um pre-filter for 9000/13000gpd
- Seamless stainless steel RO housing
- Permeate/concentrate flow meter
- Liquid filled pressure gauge x3
- Feed/ pump/ concentrate pressure gauges
- Membrane flush on/off switch
- 304SS multi-stage booster pump
- High-pressure material tubing
- Low inlet pressure protection design
- Automatic feed water solenoid valve
- Automatic flushing solenoid valve
- Adjustable flow regulation valve
- Permeate Cond./ Resis./ TDS monitor
- Automatic inlet shutoff valve
- Up to 60% recovery rate
- Chemical feed open for flexibility
- Custom design is available;
please contact us for more info

Feed Water

- Feed Water Source: Standard RO pretreatment
- Min. raw water pressure: 40psi (2.8kg/cm²)
- Min. feed water flow:
 - 6000gpd: 8gpm (1.80 m³/h)
 - 9000gpd: 11gpm (2.50 m³/h)
 - 13000gpd: 15gpm (3.40 m³/h)
- Water temperature: 15 - 38°C (60 - 100°F)
- pH: 4 - 9
- Hardness: < 17 ppm (CaCO₃)
- Turbidity: < 1 NTU
- Silt Density Index: SDI < 5
- Total Dissolved Solids: TDS <1000 ppm
- Fe³⁺: < 0.1 ppm
- Cl⁻: must be removed
- Mn: < 0.05 ppm
- H₂S: < 0.05 ppm
- Silica: < 100 ppm (concentrate flow)
- Organic: < 1 ppm

Physical Spec

Model	ORO-6000	ORO-9000	ORO-13000
Permeate (per day)	6000 Gallons (22.71 m ³)	9000 Gallons (34.07 m ³)	13000 Gallons (49.21 m ³)
RO housing	4	6	8
Operating Pressure	150psi or 200psi	150psi or 200psi	150psi or 200psi
Piping (inlet)	1"	1"	1"
Recovery (%)	50 - 60	50 - 60	50 - 60
Power (Voltage / Frequency)	220, 440, or 480v 50 or 60hz	220, 440, or 480v 50 or 60hz	220, 440, or 480v 50 or 60hz
Output	1.5 or 2.2 kw (2.0 or 3.0 hp)	2.2 or 3.0 kw (3.0 or 4.0 hp)	2.2 or 3.0 kw (3.0 or 4.0 hp)
System Dimension (L x W x H)	150 x 70 x 115 / 59" x 28" x 45"	150 x 96 x 115 / 59" x 39" x 45"	150 x 96 x 125 / 45" x 39" x 45"
Package Dimension L x W x H (cm/inch)	164 x 86 x 138 / 65" x 34" x 54"	164 x 106 x 138 / 64" x 42" x 54"	164 x 106 x 140 / 65" x 42" x 55"
Shipping Weight	260 kg (570 lbs)	330 kg (730 lbs)	370 kg (820 lbs)

* RO membrane not included; membranes can be added upon request

* ORO-6000 is available in vertical/ horizontal layout; ORO-9000/13000 are only available in horizontal mode



* It is not recommended to set the recovery rate higher than the listed recovery. Flow rates are determined by the original membrane manufacturer's testing condition of NaCl solution, 25 °C / 77 °F temperature, 225psi for standard brackish water RO, 150psi for low pressure RO, 100 - 110psi for ultra-low pressure RO at 10-15% recovery. Rejection rate of the membrane is under normal test condition defined by membrane manufacturer, and the actual flow rates performance vary based on the inlet water condition (pretreatment design), including the temperature, the pressure, and the model of the membrane. A report of feed water analysis is suggested to determine if the inlet water meets the criteria of our RO system.