Reverse Osmosis Systems 220 to 1,000 Gallons/Day For Feed Water TDS up to 1000 PPM

Designed to produce low dissolved solids water from tap or well water, these systems use high efficiency reverse osmosis membranes. The economically priced Series AA Systems offer a compact design and are simple to install and operate. When combined with a softener as pretreatment, they offer a reliable water purification solution.

Key Features

- Over 40 Years of Experience is Reflected in Our Quality
- Compact, Heavy Duty, Powder Coated Frame
- Proven components used throughout the system
- · Conservatively engineered for reliable, long term performance
- Factory tested to ensure trouble-free operation
- High quality Thin Film Composite Membranes in Stainless Steel Membrane Housings
- Sediment and Carbon Pre-filter Cartridges in Polypropylene Filter Housings
- Instrumentation for automatic operation
- Made in USA

Applications

- Restaurants
- Aquariums
- Small Manufacturing
- Residential
- Office
- Lab

- Institutions
- Ice Makers
- Humidification
- Misting
- Rinse Water
- A wide variety of other applications





















Standard Equipment

- Thin Film Composite Membranes
- Stainless Steel Pressure Vessels
- Rotary Vane Brass Pump Motor
- 5 Micron Pre-Filter (1)
- 10 Micron Carbon Filters (2)
- Polypropylene Filter Housings (3)
- Auto Feed Shut Off

- Heavy Duty Powder Coated Frame
- Liquid Filled System Pressure Gauges
- Low Pressure Switch
- Brass Pressure Regulator
- Polyethylene High pressure tubing
- Product Tank Pressure Control (turns system off with pressurized tank – tank sold separately)

Ordering Information

Model No.	System Capacity Membrane Elements		Line Sizes (NPT, Inches)			Syste	Approx. Shipping				
Model No.	GPD	m³/day	Qty.	Size (Dia.×L)	Inlet	Perm.	Conc.	Width	Depth	Height	Weight (Lb/Kg)
AA-12514	220	0.8	1	2.5"×14"	3/8''	1/4''	3/8''	21/53	17/43	26/66	55/24
AA-12521	350	1.3	1	2.5"×21"	3/8''	1/4''	3/8''	28/71	17/43	26/66	60/26
AA-22521	700	2.7	2	2.5"×21"	3/8''	1/4''	3/8''	28/71	17/43	26/66	70/30
AA-32521	1,000	3.8	3	2.5"×21"	3/8''	1/4''	3/8''	28/71	17/43	26/66	75/34

Optional Equipment

Please note that optional equipment will increase system dimensions and/or weight.

- Stainless Steel Pump
- Pressurized Product Water Storage Tank in 40 or 80 Gallon Size*
- RO Permeate Quality Monitor

- Water Softener*
- Back-washable Pretreatment* Carbon or Media
- Crating

*Recommended Minimum Options

Notes

- All dimensions and weights are approximate.
- System must operate with a pressurized storage tank to turn system on/off (quoted separately).
- Systems rated at 77°F (25°C) using 1000 ppm sodium chloride solution and 200 psi pressure. System capacity changes significantly with water temperature. For higher TDS, a water analysis must be supplied and could result in modifications to the system.
- Chlorine must be removed with a carbon filter prior to RO system, if present in the feed water.
- Water must be pretreated by a softener or antiscalant to avoid scaling the membranes.
- Standard packaging is boxed, crating optional.

Voltage/ Ordering Information

Please add our voltage codes to the end of the model number when ordering.

Example: AA-12521-116 = 110v, 1 ph, 60 hz.

Voltage Codes:

• <u>116</u> = 110v, 1ph, 60hz

• **216** = 220/230v, 1ph, 60hz

• **215** = 220/230v, 1ph, 50hz Three Phase Not Available













Series WM – 250 to 4,000 GPD Wall Mount Systems

Reverse Osmosis Systems 250 to 4,000 Gallons/Day

Designed to produce low dissolved solids water from tap or well water, these wall-mounted systems use high efficiency reverse osmosis membranes. The product water is used in applications such as spot free rinse, water stores, whole house, labs, ice makers, humidification, misting and a wide variety of other applications.

Key Features

- Over 40 Years of Experience is Reflected in Our Quality
- Compact, Heavy Duty, Powder Coated Frame
- Proven components used throughout the system
- Conservatively engineered for reliable long term performance
- Factory tested to ensure trouble-free operation

Standard Equipment

- Thin Film Composite Membranes
- PVC membrane pressure vessels
- 5 micron cartridge filter & housing
- Automatic inlet feed solenoid valve
- System control valve
- Recycle control valve
- Low pressure pump protection
- Rotary vane high pressure RO pump
- Liquid filled system pressure gauge
- Powder coated carbon steel frame
- Boxed and palletized for shipment

Controller for Automatic Operation

Monitors and/or Controls:

- Inlet valve
- Low pressure switch
- Low pressure auto restart after 1 hour
- Feed water flush at system shut-down
- On/Off with tank level
- Pre-treatment backwash/lockout
- System On/Off according to Tank Level (Float purchase separately)



• Panel mounted on/off switch

Indicator Lights:

- Service run/system flush
- Storage tank full/pretreatment lockout
- Low pressure shutdown/auto restart





I-ROC250H

Model No.	System Capacity		Membrane Elements		Line Si	zes (NPT, I	nches)	System I	Approx. Shipping		
model No.	GPD	m³/day	Qty.	Size (Dia.×L)	Inlet	Perm.	Conc.	Length	Depth	Height	Weight (Lb/Kg)
WM-12521A-116	250	0.9	1	2.5 × 21	1/2	3/8	1/4	27/69	11/28	27/69	90/41
WM-22521A-116	500	1.9	2	2.5 × 21	1/2	3/8	1/4	27/69	11/28	27/69	96/44
WM-32521A-116	750	2.6	3	2.5 × 21	1/2	3/8	1/4	34/86	11/28	27/69	106/48
WM-42521A-116	1,000	3.8	4	2.5 × 21	1/2	3/8	1/4	34/86	11/28	27/69	118/54
WM-225A-116	1,200	4.5	2	2.5 × 40	1/2	1/2	1/4	27/69	11/28	46/117	116/53
WM-325A-116	1,700	6.4	3	2.5 × 40	1/2	1/2	1/4	34/86	11/28	46/117	136/62
WM-425A-116	2,200	8.3	4	2.5 × 40	1/2	1/2	1/4	34/86	11/28	46/117	152/69
WM-24A-116	4,000	15.1	2	4.0 × 40	1/2	1/2	1/2	34/86	12/30	52/132	175/79

Notes and Voltage/ Ordering Information

- All dimensions and weights are approximate.
- Capacity Basis: 24 hrs/day
- Systems rated at: 77°F (25°C) using 1000 ppm sodium chloride solution operating at approx. 175 psi pressure.
- Minimum feed pressure to RO System: 40 PSI. System capacity changes significantly with water temperature
- Chlorine must be removed with a carbon filter prior to the RO system, if present in the feed water.
- Pretreatment for water hardness using a softener or antiscalant injection should be added to avoid scaling the membranes.
- Feed water turbidity: Less than 1 NTU; Feed water silt density index (SDI): 3 maximum. If exceeded, pretreatment with media filter recommended. All pretreatment equipment and SDI test kits are available from Applied Membranes.

<u>Voltage</u>: Above models indicate recommended voltage codes per model. Available voltages:

- <u>116</u> = 120V/1ph/60hz
- <u>215</u> = 220V/1ph/50hz.
- <u>216</u> = 220 or 230V/ 1ph/ 60hz
- Three phase not available.













Series WM – 250 to 4,000 GPD Wall Mount Systems

AMI's WM Series Wall Mount RO Systems are available with a wide variety of optional add-on accessories. All assemblies include hardware and mounting equipment for easy upgrade to your new or existing system installation.

Wall Mount Filter Cartridges

Includes 20" Big Blue Housing, Mounting Bracket and Isolation Valves for changing the cartridge. Cartridges sold separately.

Add-On Part #.: A711

Pretreatment Options Available:

• Sediment Filters in a variety of micron ratings:

1μ: H-F20BB01CF, 5μ H-F20BB05CF 10 μ: H-F20BB10CF, 30μ: 155430-43 75/25 µ Dual Rated: 155356-43 100µ: 355226-43

• Scale Inhibitor Cartridges: H-F4220-NS

• Block Carbon Filters: KX Brand: 32-425-125-20

Post-Treatment Options Available:

Calcite Cartridge to neutralize permeate pH: H-F4220CALCITE Mixed-Bed DI for ultrapure applications: H-F4220DI

Softener & Media Filters

AMI Media Filters feature fully automatic backwash or regeneration.

- Single or Twin Water Softeners
- Multi-Media Filter for 10 micron filtration
- Carbon Filter to remove chlorine
- Calcite Filter to neutralize permeate pH

See website for our full line of media filtration products



Mounting Bracket

(recommended)

Screw the mounting bracket to the wall first to simplify the mounting of the RO unit. Includes powder coated mounting plate with screws.

Part# A616 - for 27"L Units Part# A615 - for 34"L Units



Quality Monitors

Pre-packaged wall mountable quality monitors

- Permeate TDS 60Hz Part# A242, 50Hz Part# A243
- Feed TDS 60Hz Part# A252, 50Hz Part# A253
- Feed or Permeate pH 60Hz Part# A244, 50Hz Part# A245



Floor Stand

Use this free-standing carbon steel powder coated frame to convert the WM unit to a floor unit.

Part # A626



2 Locking & 2 Swivel for ease of mobility. Part # A625



Tank Pressure Controls

To automatically turn the system on/off with the permeate storage tank level. For use with a pressurized storage tank (sold separately).

Part# A621 (220v/60Hz)



Ultraviolet (UV) Systems

Sterilize water for a 99.9% reduction of bacteria and viruses in the feed and/or permeate line. (For feed line, Wall Mount Filter Cartridge Assembly is required, shown

See website for our full line of UV System products



Pressurized Storage Tank

Pressurized permeate storage tank available in 40 or 80 gallon volume. Assembly includes tank, valve, piping, tubing and pressure gauge. 40 Gallon Tank Assembly - Part # A612-40

80 Gallon Tank Assembly - Part # 4612-80



Prefilter Pressure Gauge

To allow for monitoring of the in/out pressure of the prefilter to indicate when the cartridge needs to be changed. Includes pressure gauge and fittings. Part # A623



Tank Level Controls

Turns system on/off with tank level. Dual Float assembly (part# YFL2PPAS) for system on/off; Triple Float assembly (Part# YFL3PPAS) for system on/off and low level protection for repressurization pump (not included). For use with atmospheric storage tank (sold separately).



Flowmeters

Monitor system flows. Includes mounting bracket and fittings for connection of system tubing.

1-10 GPM Part # A107 0.5-5 GPM Part # A109

















Series WMH – 2,000 to 4,000 GPD, High TDS Wall Mount Systems

Reverse Osmosis Systems • 2,000 to 4,000 GPD For Feed Water TDS 1,000 to 5,000 PPM

Designed to produce low dissolved solids water from high TDS tap or well water, these wall-mounted systems use high efficiency reverse osmosis membranes. The product water is used in applications such as spot free rinse, water stores, whole house, labs, ice makers, humidification, misting and a wide variety of other applications.

Key Features

- Over 40 Years of Experience is Reflected in Our Quality
- Compact, Heavy Duty, Powder Coated Frame
- Proven components used throughout the system
- Conservatively engineered for reliable long term performance
- Efficient, effective, and easy to install
- Factory tested to ensure trouble-free operation



With Multistage Pump

Standard Equipment

- Thin Film Composite Membranes
- FRP membrane pressure vessels
- 5 micron cartridge filter & housing
- Automatic inlet feed solenoid valve
- System control valve, Stainless SteelRecycle control valve, Stainless Steel
- Low pressure pump protection
- With multistage pump
- Liquid filled system pressure gauge
- Powder coated carbon steel frame
- Boxed and palletized for shipment

Controller Features:

Panel mounted on/off switch

Controller for Automatic Operation

Monitors and/or Controls:

- Inlet valve
- Low pressure switch
- Low pressure auto restart after 1 hour
- Feed water flush at system shut-down
- On/Off with tank level
- Pre-treatment backwash/lockout
- System On/Off according to Tank Level (Float purchase separately)

Indicator Lights:

- Service run/system flush
- Storage tank full/pretreatment lockout
- Low pressure shutdown/auto restart

UL508A Labeled



I-ROC250H

Model No.	System	Capacity	Membro	ine Elements	Line S	izes (NPT, I	nches)	System	Approx. Shipping		
Model No.	GPD	m³/day	Qty.	Size (Dia.×L)	Inlet	Perm.	Conc.	Length	Depth	Height	Weight (Lb/Kg)
WMH-14A-116	2000	8	1	4 × 40	1/2	3/8	1/4	34/86	12/30	52/132	152/69
WMH-24A-116	4000	15	2	4 × 40	1/2	3/8	1/4	34/86	12/30	52/132	175/79

Notes and Voltage/ Ordering Information

- All dimensions and weights are approximate.
- Capacity Basis: 24 hrs/day
- Systems rated at: 77°F (25°C) using 5000 ppm sodium chloride solution operating at approx. 200-250 psi pressure.
- Minimum feed pressure to RO System: 40-60 PSI. System capacity changes significantly with water temperature
- Chlorine must be removed with a carbon filter prior to the RO system, if present in the feed water.
- Pretreatment for water hardness using a softener or antiscalant injection should be added to avoid scaling the membranes.
- Feed water turbidity: Less than 1 NTU; Feed water silt density index (SDI): 3 maximum. If exceeded, pretreatment with media filter recommended. All pretreatment equipment and SDI test kits are available from Applied Membranes.

Voltage Codes: Above models indicate recommended voltage codes per model.

Available voltages:

- 116 = 120V/1ph/60hz
- <u>215</u> = 220V/1ph/50hz.
- <u>216</u> = 220 or 230V/ 1ph/ 60hz
- Three phase not available.













applied[®] Systems

Series WMH – 2,000 to 4,000 GPD, High TDS Wall Mount Systems

AMI's WMH Series Wall Mount RO Systems are available with a wide variety of optional add-on accessories. All assemblies include hardware and mounting equipment for easy upgrade to your new or existing system installation.

Wall Mount Filter Cartridges

Includes 20" Big Blue Housing, Mounting Bracket and Isolation Valves for changing the cartridge. Cartridges sold separately.

Add-On Part #.: A711

Pretreatment Options Available:

• Sediment Filters in a variety of micron ratings:

1μ: H-F20BB01CF, 5μ H-F20BB05CF 10 µ: H-F20BB10CF, 30µ: 155430-43 75/25 µ Dual Rated: 155356-43 100µ: 355226-43

• Scale Inhibitor Cartridges: H-F4220-NS

Block Carbon Filters: KX Brand: 32-425-125-20

Post-Treatment Options Available:

• Calcite Cartridge to neutralize permeate pH: H-F4220CALCITE

• Mixed-Bed DI for ultrapure applications: H-F4220DI

Softener & Media Filters

AMI Media Filters feature fully automatic

- Single or Twin Water Softeners
- Calcite Filter to neutralize permeate pH



Mounting Bracket

(recommended) Screw the mounting bracket to the wall first to simplify the mounting of the RO unit. Includes powder coated mounting plate with screws.

Part# A616



Ultraviolet (UV) Systems

Sterilize water for a 99.9% reduction of bacteria and viruses in the feed and/or permeate line. (For feed line, Wall Mount Filter Cartridge Assembly is required, shown above.)

See website for our full line of UV System products



backwash or regeneration.

- Multi-Media Filter for 10 micron filtration
- Carbon Filter to remove chlorine
- See website for our full line of media filtration products

Floor Stand

Use this free-standing carbon steel powder coated frame to convert the WMH unit to a floor unit. Part # A626



2 Locking & 2 Swivel for ease of mobility. Part # A625



Ouality Monitors

Pre-packaged wall mountable quality monitors

- Permeate TDS
 - 60Hz Part# A242, 50Hz Part# A243
- Feed TDS
 - 60Hz Part# A252, 50Hz Part# A253
- Feed or Permeate pH
 - 60Hz Part# A244, 50Hz Part# A245

Tank Level Controls

Turns system on/off with tank level. Dual Float assembly (part# YFL2PPAS) for system on/off; Triple Float assembly (Part# YFL3PPAS) for system on/off and low level protection for re-pressurization pump (not included). For use with atmospheric storage tank (sold separately).



Tank Pressure Controls

To automatically turn the system on/off with the permeate storage tank level. For use with a pressurized storage tank (sold separately).

Part# A621 (220v/60Hz)

Flowmeters

Monitor system flows. Includes mounting bracket and fittings for connection of system tubing.

1-10 GPM Part # A107 0.5-5 GPM Part # A109



Pressurized Storage Tank

Pressurized permeate storage tank available in 40 or 80 gallon volume. Assembly includes tank, valve, piping, tubing and pressure gauge.

40 Gallon Tank Assembly - Part # A612-40 80 Gallon Tank Assembly - Part # 4612-80



Prefilter Pressure Gauge

To allow for monitoring of the in/out pressure of the prefilter to indicate when the cartridge needs to be changed. Includes pressure gauge and fittings.

Part # A623



















Advantage Series – Complete Compact RO Systems up to 10,000 GPD

- Compact, Customizable and Expandable
- Low Maintenance and Low Operating Costs
- Fully Assembled and Ready to Run

AMI's Advantage Series RO Systems are designed to produce low dissolved solids product water from tap or well water. These systems use high efficiency, low energy membranes, and run at high recovery offering low maintenance and operational costs. They incorporate carbon filters for chlorine removal, and sediment pre-filtration prior to the RO for a packaged unit that is ready to run out of the box.

Systems can be private labeled to help you further your own brand awareness.



- Thin Film Composite Membranes in SS Vessels
- Big Blue Carbon block and 5M Sediment Prefilters in Housings.
- Automatic Inlet Feed Solenoid Valve
- System & Recycle Control Valves
- Low Pressure Pump Protection
- High Pressure RO Pump
- (4) Pressure Gauges: System Pressure, Concentrate Pressure, Filter In and Filter Out.
- (3) Panel Mounted Flow Meters: Permeate, Concentrate and Recycle Flow.
- Powder Coated Carbon Steel Frame
- Boxed and Palletized for Shipment

Automatic Microprocessor Controller

Monitors and/or Controls:

- Inlet Valve
- Low Pressure Switch
- Pre-Treatment Backwash/Lockout
- System On/Off According to Tank Level (Floats Purchased Separately)

Indicator Lights:

- Low Pressure Shutdown/Auto Restart
- Power On/ Pretreatment Lockout
- Storage Tank Full

Why Applied Membranes?

- Over 40 years of experience with over 10,000 commercial/industrial water treatment systems in operation.
- Our products are being used in over 100 countries worldwide.
- Our customers include major national and international companies in every field of application.
- We stock more components for all sizes of RO systems than any other company.
- We have earned an enviable reputation for our product quality, performance reliability and business integrity.

Key Features

- Compact, Heavy Duty, Powder Coated Frame
- Proven components used throughout the system
- Conservatively engineered for reliable long term performance
- Factory tested to ensure trouble-free operation

Applications

- Spot Free Rinse/Car Wash
- Water Stores
- Whole House
- Labs
- Large Office
- Institutions
- Ice Makers

- Humidification
- Misting
- Manufacturing
- Rinse Water
- Wide Variety of Other Applications

















Advantage Series – Complete Compact RO Systems up to 10,000 GPD

Series P: 350 to 1,000 GPD

- 10" Big Blue Carbon Block and 5 Micron Sediment Filter
- 2.5" Diameter × 21" Length Thin Film Membranes in SS Housings
- System Dimensions: 21.75"L × 20"W × 33"H

Model No *	System	Capacity	Membrane	C	onnectio	ons	Approx. Shipping
Model No.*	." GPD m³/day		Qty.	Inlet	Conc.	Perm.	Weight (Lb/Kg)
P-125A	350	1.3	1	1/2''	3/8''	3/8''	60
P-225A	700	2.7	2	1/2''	3/8''	3/8''	65
P-325A	1,000	3.8	3	1/2''	3/8''	3/8''	70



Series T: 600 to 1,700 GPD

- 20" Big Blue Carbon Block and 5 Micron Sediment Filter
- 2.5" Diameter × 40" Length Thin Film Membranes in SS Housings
- System Dimensions: 23"L × 24"W × 55"H

Model No.*	System	Capacity	Membrane	С	onnectio	ons	Approx. Shipping
Model No.	GPD	m³/day	Qty.	Inlet	Inlet Conc. Perm.		Weight (Lb/Kg)
T-125A	600	2.0	1	3/4"	1/2''	1/2''	95
T-225A	1,200	4.5	2	3/4''	1/2''	1/2''	105
T-325A	1,700	6.4	3	3/4''	1/2''	1/2''	115



Series M: 2,000 to 10,000 GPD

- 20" Big Blue Carbon Block Filters (2) and 5 Micron Sediment Filter
- 4" Diameter × 40" Length Thin Film Membranes in SS Housings
- System Dimensions: 35"L × 24"W × 55"H

Model No.*	System	Capacity	Membrane	С	onnectio	ons	Approx. Shipping
Model No.	GPD	m³/day	Qty.	Inlet	Conc.	Perm.	Weight (Lb/Kg)
M-14A	2,000	7.5	1	3/4"	1/2''	1/2''	220
M-24A	4,000	15.0	2	3/4"	1/2''	1/2''	235
M-34A	5,800	22.0	3	3/4"	1/2''	1/2''	250
M-44A**	7,500	28.0	4	3/4"	1/2''	1/2''	265
M-54A**	9,000	34.0	5	3/4''	1/2''	1/2''	280
M-64A**	10,000	38.0	6	3/4"	1/2''	1/2''	295



Voltage Code and System Notes

*Voltage: Please add our voltage codes to the end of the model number when ordering. Example: M-14A-116 Voltage Codes: • 116 = 110v, 1ph, 60hz (P & T Models only) • 216 = 220/230v, 1ph, 60hz • 215 = 220/230v, 1ph, 50hz **M-44A, M-54A, and M-64A are available in 215 and 216 voltage only. 116 is not available for these models.

- **Recommended Pre-Treatment Equipment:** All pretreatment equipment and SDI test kits are available from Applied Membranes. **Water Softener:** Hardness must be removed if present in feed water prior to RO to avoid scaling the membranes. Multimedia filter: If feed water exceeds < 1 NTU turbidity, or silt density index (SDI) of 3, media filter pretreatment recommended.
- Systems rated at: 77°F (25°C) using 1000 ppm sodium chloride solution operating at approx. 200 psi. Capacity Basis: 24 hrs/day
- Minimum feed pressure to RO System: 40-60 PSI. System capacity changes significantly with water temperature
- All dimensions and weights are approximate.















Reverse Osmosis Systems 300 to 19,000 Gallons/Day For feed water TDS 500 to 1000 PPM

Designed to produce low dissolved solids water from tap or well water, these RO systems use high efficiency reverse osmosis membranes. Part of the L-series family (other systems include XL and HL series), these RO systems are designed to work at pressures of 200-250 psi for higher TDS water and use TW reverse osmosis membranes. The TW RO membranes offer higher salt removal and the higher operating pressure overcomes the loss of membrane flow due to higher TDS level.

These reverse osmosis systems use the proven, reliable components and are mounted on a sturdy powder-coated metal frame. There are numerous design details learned from decades of experience that are incorporated in our water filtration systems. Our process and fluid design ensures an optimum membrane life and minimizes the membrane fouling.



- Over 40 Years of Experience is Reflected in Our Quality
- Compact, Heavy Duty, Powder Coated Frame
- Proven components used throughout the system
- Conservatively engineered for reliable long term performance
- Factory tested to ensure trouble-free operation

Applications

- Spot Free Rinse/Car Wash
- Water Stores
- Whole House
- Labs
- Large Office
- Institutions
- Ice Makers

- Humidification
- Misting
- Manufacturing
- Rinse Water
- · Wide Variety of Other **Applications**

Why Applied Membranes?

- Over 10,000 commercial/industrial systems in operation
- Our products are being used in over 100 countries worldwide
- Our customers include major national and international companies in every field of application
- We stock more components for all sizes of RO systems than any other company
- We have earned an enviable reputation for our product quality, performance reliability and business integrity



















Series L – 300 to 19,000 GPD RO Systems

Standard Equipment

- Thin Film Composite Membranes
- Stainless steel membrane pressure vessels
- 5 micron 20" cartridge filter & housing
- Feed water temperature gauge
- Automatic inlet feed solenoid valve
- Permeate, Concentrate & Recycle Flowmeters
- System control valve
- Recycle control valve
- Low pressure pump protection
- High pressure RO pump
 - o L-12521 L-24A: Brass Rotary Vane
 - o L-34A L-124A: SS multistage with throttling valve
- Automatic membrane flush
- 4) Liquid filled pressure gauges for filter in/out and system pressures
- Feed TDS displayed on controller LED
- Product TDS displayed on controller LED
- System on/off with 2-level tank floats
- Powder coated carbon steel frame
- Boxed and palletized for shipment

Microprocessor Controller for Automatic Operation

Monitors and/or Controls:

- Inlet valve
- Delayed start-up of high pressure pump
- Feed water flush at system shut-down
- Low pressure switch
- On/Off with tank level
- Feed Water Quality (TDS)
- Permeate Water Quality (TDS)
- Pre-treatment backwash/lockout

Controller Features:

- Backlit LED Display
- LED indicator light for system status/alarm
- Front panel access port for calibration of TDS sensor
- LED indicator light for water quality (TDS)
- Start-up and shut-down with tank level
- Feed flush at shut-down
- Low pressure shut-down
- Low pressure automatic restart
- Delayed start-up of high pressure pump

I-ROC150S



UL Listing Optional

LED Display:

- Feed TDS
- Permeate TDS
- Operating Status
- Alarm Condition

Ordering Information

	System (Capacity	Memb	orane Elements	Line Si	zes (NPT, I	nches)	System	Dimensions	(in/cm)	Approx.
Model No.	GPD	m³/day	Qty.	Size (Dia.×L)	Inlet	Perm.	Conc.	Length	Depth	Height	Shipping Weight (Lb/Kg)
L-12521A	300	1	1	2.5" × 21"	3/4''	3/8''	3/8''	20/51	24/61	55/140	230/104
L-125A	600	2	1	2.5" × 40"	3/4''	3/8''	3/8''	20/51	24/61	55/140	240/109
L-225A	1,200	5	2	2.5" × 40"	3/4''	3/8''	3/8''	20/51	24/61	55/140	250/113
L-14A	1,800	7	1	4" × 40"	3/4''	1/2''	1/2''	20/51	24/61	55/140	275/125
L-24A	3,000	12	2	4" × 40"	3/4''	1/2''	1/2''	20/51	24/61	55/140	300/136
L-34A	5,500	21	3	4" × 40"	3/4''	1/2''	1/2''	20/51	32/82	55/140	325/147
L-44A	7,000	27	4	4" × 40"	3/4''	1/2''	1/2''	20/51	32/82	55/140	350/159
L-54A	8,500	32	5	4" × 40"	3/4''	1/2''	1/2''	20/51	32/82	55/140	375/170
L-64A	10,000	38	6	4" × 40"	3/4''	1/2''	1/2''	20/51	32/82	55/140	400/181
L-74A	11,500	44	7	4" × 40"	3/4''	1/2''	1/2''	20/51	40/102	55/140	441/200
L-84A	13,000	49	8	4" × 40"	3/4''	1/2''	1/2''	20/51	40/102	55/140	466/211
L-94A	14,400	55	9	4" × 40"	3/4''	1/2''	1/2''	20/51	40/102	55/140	491/223
L-104A	16,000	60	10	4" × 40"	3/4''	1/2''	1/2''	20/51	46/117	55/140	516/234
L-114A	17,300	66	11	4" × 40"	3/4''	1/2''	1/2''	20/51	46/117	55/140	541/245
L-124A	19,000	72	12	4" × 40"	3/4''	1/2''	1/2''	20/51	46/117	55/140	566/257

Notes and Voltage/ Ordering Information

- Recommended Pre-Treatment Equipment: All pretreatment equipment and SDI test kits are available from Applied Membranes.
 - o **Carbon Filter:** Chlorine must be removed with a carbon filter prior to the RO system, if present in the feed water.
 - Water Softener: Hardness must be removed if present in feed water prior to RO to avoid scaling the membranes.
 - o **Multimedia filter**: If feed water exceeds <1 NTU turbidity, or silt density index (SDI) of 3, media filter pretreatment recommended.
- Capacity Basis: 24 hrs/day
- Systems rated at: 77°F (25°C) using 1000 ppm sodium chloride solution operating at approx. 200 psi (14 kg/cm²) pressure. For feed water with higher TDS refer to our Series HL brochure.

Minimum feed pressure to RO System: 40-60 PSI. System capacity changes significantly with water temperature

- <u>Voltage:</u> Please add our voltage codes to the end of the model number when ordering. Example: L-12521-<u>116</u> = 110v, 1 ph, 60 hz.
 - Voltage Codes:
- 116 = 110v, 1ph, 60hz (up to L-24A only)
- **216** = 220/230v, 1ph, 60hz
- <u>215</u> = 220/230v, 1ph, 50hz

- <u>236</u> = 240v, 3ph, 60hz (L-34A+ Only)
- <u>235</u> = 240v, 3ph, 50hz (L-34A+ Only)
- <u>436</u> = 460v, 3ph, 60hz (L-34A+ Only)

All dimensions and weights are approximate.













applied® systems



Series XL - 2,000 to 10,000 GPD Low Energy RO Systems

Reverse Osmosis Systems 2,000 to 10,000 Gallons/Day For Feed Water TDS Less Than 1,000 PPM

Designed to produce low dissolved solids water from tap or well water, these systems use extra low energy reverse osmosis membranes. The product water is used in applications such as spot free rinse, water stores, whole house, labs, ice makers, humidification, misting and a wide variety of other applications.

Part of the L-series family (other systems include L and HL series), these systems are designed to work at pressure less than 150 psi. These systems use extra-low energy membranes and are best suited for water of less than 1,000 PPM total dissolved solids (TDS). The systems use the proven, reliable components and are mounted on a sturdy powder-coated metal frame. There are numerous design details, learned from decades of experience that are incorporated in our systems. Our process and fluid design ensures an optimum membrane life and minimizes the membrane fouling.

Key Features

- Over 40 Years of Experience is Reflected in Our Quality
- Compact, Heavy Duty, Powder Coated Frame
- Proven components used throughout the system
- Conservatively engineered for reliable long term performance
- Factory tested to ensure trouble-free operation

Why Applied Membranes?

- Over 10,000 commercial/industrial systems in operation
- Our products are being used in over 100 countries worldwide
- From packaged systems to custom engineered Reverse Osmosis systems, we can take care of your needs
- We are one of the few companies that have the expertise to provide Reverse Osmosis systems for drinking water, boiler feed water, seawater, desalination, ultrapure water, USP water, and water reuse
- We have supplied more systems to more countries than most of our competitors
- Our customers include major national and international companies in every field of application
- We stock more components for all sizes of RO systems than any other company
- We have earned an enviable reputation for our product quality, performance reliability and business integrity





















Series XL - 2,000 to 10,000 GPD Low Energy RO Systems

Standard Equipment

- Thin Film Composite Extra Low Energy Membranes
- Stainless steel membrane pressure vessels
- 5 micron 20" cartridge filter & housing
- Automatic inlet feed solenoid valve
- Permeate flowmeter
- Concentrate flowmeter
- System control valve
- Recycle control valve
- Low pressure pump protection
- Stainless steel multistage RO pump with SS pump throttling valve
- Automatic membrane flush
- Liquid filled pressure gauge for system pressure
- Feed TDS and percent rejection displayed on controller LED
- Product TDS displayed on controller LED
- System on/off with tank level (tank floats included)
- Powder coated carbon steel frame
- Boxed and palletized for shipment

Microprocessor Controller for Automatic Operation

Monitors and/or Controls:

- Inlet valve
- Delayed start-up of high pressure pump
- Feed water flush at system shut-down
- Low pressure switch
- On/Off with tank level
- Feed Water Quality (TDS)
- Permeate Water Quality (TDS)
- Pre-treatment backwash/lockout

Controller Features:

- Backlit LED Display
- LED indicator light for system status/alarm
- Front panel access port for calibration of TDS sensor
- LED indicator light for water quality (TDS)
- Start-up and shut-down with tank level
- Feed flush at shut-down
- Low pressure shut-down
- Low pressure automatic restart
- Delayed start-up of high pressure pump

I-ROC150S



UL Listing Optional

LED Display:

- Feed TDS
- Permeate TDS
- Operating Status Alarm Condition

Recommended Optional Pre-Treatment Equipment

- Carbon filter
- Water Softener

Multi-media filter

Model No.	System (Capacity	Qty. of 4x40 Membrane	Line S	izes (NPT, lı	nches)	System	Approx. Shipping		
Model No.	GPD	m³/day	Elements (XLE)	Inlet	Perm.	Conc.	Length	Depth	Height	Weight (Lb/Kg)
XL-14A-216	2,000	7.5	1	3/4	1/2	1/2	20/51	28/71	54/137	275/125
XL-24A-216	4,000	15	2	3/4	1/2	1/2	20/51	28/71	54/137	300/136
XL-34A-216	5,800	22	3	3/4	1/2	1/2	20/51	28/71	54/137	325/147
XL-44A-216	7,500	28	4	3/4	1/2	1/2	20/51	34/87	54/137	350/159
XL-54A-216	9,000	34	5	3/4	1/2	1/2	20/51	34/87	54/137	375/170
XL-64A-216	10,000	38	6	3/4	1/2	1/2	20/51	34/87	54/137	400/181

Notes and Voltage/ Ordering Information

- All dimensions and weights are approximate.
- Capacity Basis: 24 hrs/day
- Systems rated at: 77°F (25°C) using 1,000 ppm sodium chloride solution operating at approx. 200 psi pressure. System capacity changes significantly with water temperature. For higher TDS a water analysis must be supplied and could result in modifications to the system or changing from XL to L or HL series system.
- Minimum feed pressure to RO System: 40-60 PSI.
- Chlorine must be removed with a carbon filter or with chemical injection prior to the RO system, if present in feed water.
- Pretreatment for water hardness using a softener should be added to avoid scaling the membranes.
- Feed water turbidity: Less than 1 NTU; Feed water silt density index (SDI): 3 maximum. If exceeded, pretreatment with media filter recommended. All pretreatment equipment and SDI test kits are available from Applied Membranes.
- **Voltage Codes: 216** = 220 -240v/lph/60hz **215** = 220-240v/lph/50hz.

Three phase or other voltages not available with XL Series. See Series L or HL.













Series HL – 300 to 9,000 GPD High TDS RO Systems

Reverse Osmosis Systems 300 to 9,000 Gallons/Day For Feed Water TDS 1,000 to 5,000 PPM

Designed to produce low dissolved solids water from tap or well water, these RO systems use high efficiency reverse osmosis membranes. The product water is used in applications such as water stores, whole house, ice makers, humidification, misting and a wide variety of other applications.

Part of the L-series family (other systems include L and XL series), these systems treat higher TDS water using thin film membranes and FRP membrane housings. All high pressure lines and components are made of corrosion resistant materials. The operating pressure is between 200 and 250 psi. Careful design steps are taken to minimize the highly corrosive nature of these brackish waters.

These reverse osmosis systems use the proven, reliable components and are mounted on a sturdy powder-coated metal frame. There are numerous design details learned from decades of experience that are incorporated in our water filtration systems. Our process and fluid design ensures an optimum membrane life and minimizes the membrane fouling.

Key Features

- Over 40 Years of Experience is Reflected in Our Quality
- Compact, Heavy Duty, Powder Coated Frame
- Proven components used throughout the system
- Conservatively engineered for reliable long term performance
- Factory tested to ensure trouble-free operation



Why Applied Membranes?

- Over 10,000 commercial/industrial systems in operation
- Our products are being used in over 100 countries worldwide
- From packaged systems to custom engineered Reverse Osmosis systems, we can take care of your needs
- We are one of the few companies that have the expertise to provide Reverse Osmosis systems for drinking water, boiler feed water, seawater, desalination, ultrapure water, USP water, and water reuse
- We have supplied more systems to more countries than most of our competitors
- Our customers include major national and international companies in every field of application
- We stock more components for all sizes of RO systems than any other company
- · We have earned an enviable reputation for our product quality, performance reliability and business integrity













_IED® SYSTEMS Series HL - 300 to 9,000 GPD High TDS RO Systems

Standard Equipment

- Thin Film Composite Membranes
- FRP membrane pressure vessels
- 5 micron 20" cartridge filter & housing
- Feed water temperature
- Automatic inlet feed solenoid valve
- Permeate, Concentrate & Recycle
- Flowmeters
- System control valve, Stainless Steel
- Recycle control valve, Stainless Steel
- Low pressure pump protection
- High pressure stainless steel RO pump
- Automatic membrane flush
- 4) Liquid filled pressure gauges for filter in/out and system pressures
- Feed and permeate TDS displayed on controller LED with percent rejection
- System on/off with 2-level tank floats
- Stainless Steel and corrosion resistant materials on high pressure side
- Powder coated carbon steel frame
- Boxed and palletized for shipment

Microprocessor Controller for Automatic Operation

Monitors and/or Controls:

- Inlet valve
- Delayed start-up of high pressure pump
- Feed water flush at system shut-down
- Low pressure switch
- On/Off with tank level
- Feed Water Quality (TDS)
- Permeate Water Quality (TDS)
- Pre-treatment backwash/lockout

Controller Features:

- Backlit LED Display
- LED indicator light for system status/alarm
- Front panel access port for calibration of TDS sensor
- LED indicator light for water quality (TDS)
- Start-up and shut-down with tank level
- Feed flush at shut-down
- Low pressure shut-down
- Low pressure automatic restart
- Delayed start-up of high pressure pump

I-ROC150S



UL Listing Optional

LED Display:

- Feed TDS
- Permeate TDS
- Operating Status
- Alarm Condition

Recommended Optional Pre-Treatment Equipment

 Water Softener Carbon filter Multi-media filter Antiscalant Injection

Ordering Information

	System	Capacity	Membra	ne Elements	Line S	izes (NPT,	Inches)	System	Dimensions	(in/cm)	Approx.
Model No.	GPD	m³/day	Qty.	Size (Dia.×L)	Inlet	Perm.	Conc.	Length	Depth	Height	Shipping Weight (Lb/Kg)
HL-12521A-116	300	1	1	2.5 × 21	3/4	3/8	3/8	20/51	24/61	55/140	230/104
HL-125A-116	600	2	1	2.5 × 40	3/4	3/8	3/8	20/51	24/61	55/140	240/109
HL-225A-116	1,200	5	2	2.5 × 40	3/4	3/8	3/8	20/51	24/61	55/140	250/113
HL-14A-116	1,800	6	1	4 × 40	3/4	1/2	1/2	20/51	24/61	55/140	275/125
HL-24A-116	3,000	11	2	4 × 40	3/4	1/2	1/2	20/51	24/61	55/140	300/136
HL-34A-216	4,500	17	3	4 × 40	3/4	1/2	1/2	20/51	32/82	55/140	325/147
HL-44A-216	6,000	23	4	4 × 40	3/4	1/2	1/2	20/51	32/82	55/140	350/159
HL-54A-216	7,500	28	5	4 × 40	3/4	1/2	1/2	20/51	32/82	55/140	375/170
HL-64A-216	9,000	34	6	4 × 40	3/4	1/2	1/2	20/51	32/82	55/140	400/181

Notes and Voltage/ Ordering Information

- All dimensions and weights are approximate.
- Capacity Basis: 24 hrs/day
- Systems rated at: 77°F (25°C) using 1000 to 5000 ppm sodium chloride solution operating at approx. 200-225 psi pressure.
- Minimum feed pressure to RO System: 40-60 PSI. System capacity changes significantly with water temperature
- Chlorine must be removed with a carbon filter prior to the RO system, if present in feed water.
- Pretreatment for water hardness using a softener or antiscalant injection should be added to avoid scaling the membranes.
- Feed water turbidity: Less than 1 NTU; Feed water silt density index (SDI): 3 maximum. If exceeded, pretreatment with media filter recommended. All pretreatment equipment and SDI test kits are available from Applied Membranes.
- **<u>Voltage:</u>** Please add our voltage codes to the end of the model number when ordering. Example: HL-12521-116 = 110v, 1 ph, 60 hz.
 - Voltage Codes:
- 116 = 110v, 1ph, 60hz (up to L-24A only)
- 216 = 220/230v, 1ph, 60hz

- **215** = 220/230v, 1ph, 50hz
- Three Phase Not Available













Series HLS -1,400 to 6,600 GPD High TDS Brackish Water RO Systems

Reverse Osmosis Systems 1,400 to 6,600 Gallons/Day For Feed Water TDS up to 15,000 PPM

Designed to produce low dissolved solids water from high TDS brackish well water or similar source water, these RO systems use high efficiency reverse osmosis membranes in FRP membrane housings. The product water is used in applications such as water stores, whole house, ice makers, humidification, misting and a wide variety of other applications.

HLS Series RO systems incorporate careful design steps taken to minimize the highly corrosive nature of these brackish waters. All high pressure lines and components are made of corrosion resistant materials. These BWRO systems operate at pressures between 350 and 500 psi.

These reverse osmosis systems use the proven, reliable components and are mounted on a sturdy powder-coated metal frame. There are numerous design details learned from decades of experience that are incorporated in our water filtration systems. Our process and fluid design ensures an optimum membrane life and minimizes the membrane fouling.

Key Features

- Over 40 Years of Experience is Reflected in Our Quality
- Compact, Heavy Duty, Powder Coated Frame
- Proven components used throughout the system
- Conservatively engineered for reliable long term performance
- Factory tested to ensure trouble-free operation



Why Applied Membranes?

- Over 10,000 commercial/industrial systems in operation
- Our products are being used in over 100 countries worldwide
- From packaged systems to custom engineered Reverse Osmosis systems, we can take care of your needs
- We are one of the few companies that have the expertise to provide Reverse Osmosis systems for drinking water, boiler feed water, seawater, desalination, ultrapure water, USP water, and water reuse
- We have supplied more systems to more countries than most of our competitors
- Our customers include major national and international companies in every field of application
- We stock more components for all sizes of RO systems than any other company
- We have earned an enviable reputation for our product quality, performance reliability and business integrity















Series HLS-1,400 to 6,600 GPD High TDS Brackish Water RO Systems

Standard Equipment

- Thin Film Composite Membranes
- FRP membrane pressure vessels
- 5 micron 20" cartridge filter & housing
- Feed water temperature
- Automatic inlet feed solenoid valve
- Permeate, Concentrate & Recycle **Flowmeters**
- System control valve, Stainless Steel
- Recycle control valve, Stainless Steel
- Low pressure pump protection
- High pressure stainless steel RO pump
- Automatic membrane flush with fresh water amuq
- Liquid filled pressure gauges for filter in/out and system pressures
- Feed and permeate TDS displayed on controller LED with percent rejection
- System on/off with 2-level tank floats
- Powder coated carbon steel frame
- Boxed and palletized for shipment

Microprocessor Controller for Automatic Operation **UL508A Labeled Monitors and/or Controls:**

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

Controller Features:

- Backlit LED Display
- Multi-function keypad
- Visual and audible alarm & silence key
- Programmable time delays, set-points and flush mode
- Visual indicator alarm light Low pressure automatic restart



I-ROC150S

LED Display:

- Permeate TDS
- Feed TDS with % Rejection
- Water Temperature
- **Operating Hours**
- Operating Status Alarm condition

Recommended Optional Pre-Treatment Equipment

 Water Softener • Antiscalant Injection Carbon filter Multi-media filter

Ordering Information

	System	Capacity	Membrane Elements		Line Sizes (NPT, Inches)			System	Approx.		
Model No.	GPD	m³/day	Qty.	Size (Dia.×L)	Inlet	Perm.	Conc.	Length	Depth	Height	Shipping Weight (Lb/Kg)
HLS-14A	1,400	5.3	1	4 × 40	1	1/2	1/2	20/51	24/61	55/140	400/181
HLS-24A	3,500	13.2	2	4 × 40	1	1/2	1/2	20/51	24/61	55/140	425/193
HLS-34A	4,600	17.4	3	4 × 40	1	1/2	1/2	20/51	32/82	55/140	450/204
HLS-44A	5,500	21	4	4 × 40	1	3/4	3/4	20/51	32/82	55/140	475/216
HLS-54A	6,200	23.5	5	4 × 40	1	3/4	3/4	20/51	32/82	55/140	500/227
HLS-64A	6,630	25	6	4 × 40	1	3/4	3/4	20/51	32/82	55/140	525/238

Notes and Voltage/ Ordering Information

- All dimensions and weights are approximate.
- Capacity Basis: 24 hrs/day
- Systems rated at: 77°F (25°C) using 15,000 ppm sodium chloride solution operating at approx. 350-500 psi pressure.
- Minimum feed pressure to RO System: 40-60 PSI. System capacity changes significantly with water temperature
- Chlorine must be removed with a carbon filter prior to the RO system, if present in feed water.
- Pretreatment for water hardness using a softener or antiscalant injection should be added to avoid scaling the membranes.
- Feed water turbidity: Less than 1 NTU; Feed water silt density index (SDI): 3 maximum. If exceeded, pretreatment with media filter recommended. All pretreatment equipment and SDI test kits are available from Applied Membranes.
- **<u>Voltage:</u>** Please add our voltage codes to the end of the model number when ordering. Example: HLS-14A-236 = 220 or 230v, 3 ph, 60 hz.
 - Voltage Codes: • **216** = 220 or 230v/ 1ph/ 60hz
 - **236** = 220 or 230v/ 3ph/ 60hz

• 436 = 460 or 480v/3ph/60 Hz













Series J – 7,000 to 28,800 GPD RO Systems

Designed to produce low dissolved solids water from tap or well water, these systems use highly efficient RO Membranes. The product water is used in applications such as rinse water, pharmaceutical, food processing, bottled water, hotels, beverage, hospitals, and a wide variety of other applications.



Series J Systems use 4"×40" membrane elements. Pressure vessels contain one or two membrane elements each and are mounted in a horizontal position.

Key Features

- Over 40 Years of Experience is Reflected in Our Quality
- Heavy duty powder coated frame
- Stainless Steel High Pressure components, Stainless Steel Pump
- Microprocessor controlled operation
- Conservatively engineered for reliable, long term performance
- Factory tested to ensure trouble-free operation















Standard Equipment

- Thin Film Composite Membranes
- Stainless steel multi-stage centrifugal pump
- Stainless steel membrane pressure vessels
- Powder coated carbon steel skid
- Sediment filter with 5 micron filters
- 316SS high pressure piping and Sch. 80 PVC low pressure piping
- Motorized automatic inlet feed valve
- Feed pump throttling valve, SS
- Concentrate & recycle panel mounted SS flow control valves
- Automatic membrane feed flush
- Low inlet pressure switch
- High pressure switch
- 4) Panel mounted liquid filled pressure gauges: Filter in/out, pump, concentrate
- 3) Panel mounted flowmeters: Product, reject and
- Product TDS (or Conductivity) with digital display readout
- Cleaning ports
- System on/off with 2-level tank floats

Microprocessor Controller for Automatic Operation

Monitors and/or Controls:

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

Controller Features:

- Backlit LED Display
- Multi-function keypad
- Visual and audible alarm & silence key
- Programmable time delays, set-points and flush mode
- Visual indicator alarm light
- Low pressure automatic restart

UL508A Labeled



I-ROC150S

LED Display:

- Permeate TDS
- Feed TDS with % Rejection
- Water Temperature
- Operating Hours
- Operating Status
- Alarm condition

Optional Equipment

- Stainless steel boost or repressurization pump
- pH monitor for feed or for permeate
- Chemical injection
- Pre-treatment: Softener, carbon, media
- ORP monitor/controller
- Filter housing upgrade to SS
- Turbidity monitor
- Permeate divert to drain
- UV system, feed or permeate
- FRP membrane housings
- Low energy membranes
- Clean-in-place doubles as a permeate flush system

Model No.		Capacity		No. of	Line	Sizes (Inc	ches)	Dim	ensions (In	/cm)	Approx Weight
Model No.	GPM	GPD	m³/hr	Elements	Inlet	Perm.	Conc.	Length	Width	Height	(lb/kg)
J-44A	5	7,000	1.1	4	1	3/4	3/4	80/203	35/89	75/191	1,070/485
J-54A	6	8,500	1.3	5	1	3/4	3/4	80/203	35/89	75/191	1,130/513
J-64A	7	10,000	1.6	6	1	3/4	3/4	80/203	35/89	75/191	1,190/540
J-74A	8	11,500	1.8	7	1	3/4	3/4	80/203	35/89	75/191	1,275/578
J-84B	9	13,000	2.0	8	1½	1	3/4	100/254	35/89	75/191	1,410/640
J-104B	10	14,400	2.3	10	1½	1	3/4	100/254	35/89	75/191	1,530/694
J-124B	12	17,300	2.7	12	1½	1	3/4	100/254	35/89	75/191	1,610/776
J-144B	14	20,000	3.2	14	1½	1	3/4	100/254	35/89	75/191	1,830/830
J-164B	16	23,000	3.6	16	1½	1	3/4	100/254	35/89	75/191	1,950/885
J-184B	18	26,000	4.1	18	1½	1	3/4	100/254	35/89	80/203	2,070/939
J-204B	20	28,800	4.5	20	1½	1	3/4	100/254	35/89	80/203	2,190/993

Notes and Voltage/ Ordering Information

NOTES: All dimensions and weights are approximate. Capacity Basis: 24 hrs/day. Systems rated at: 77°F (25°C) using 2000 ppm sodium chloride solution operating at approx. 225-250 psi pressure. Minimum feed pressure to RO System: 40-60 PSI. System capacity changes significantly with water temperature. For higher TDS a water analysis must be supplied and could result in modifications to the system. Chlorine must be removed with a carbon filter or with chemical injection prior to the RO system, if present in feed water. Pretreatment for water hardness using a softener or antiscalant injection should be added to avoid scaling the membranes. Feed water turbidity: Less than 1 NTU; Feed water silt density index (SDI): 3 maximum. If exceeded, pretreatment with media filter recommended. All pretreatment equipment and SDI test kits are available from Applied Membranes.

Please add our voltage codes to the end of the model number when ordering: Example: J-84B-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













Series K – 28,800 to 460,000 GPD RO Systems

Designed to produce low dissolved solids water from tap or well water, these systems use high efficiency reverse osmosis membranes. The product water is used in applications such as semiconductor, boiler feed, pharmaceutical, municipal, water reuse, food processing, bottling, and a wide variety of other applications.

Series K systems use 8" Diameter, 40" long membrane elements. Pressure vessels contain multiple elements and are mounted in a horizontal position.





Key Features

- Over 40 Years of Experience is Reflected in Our Quality
- Heavy duty powder coated frame
- SS High pressure components, SS Pump
- Microprocessor Controlled Operation
- Conservatively engineered for reliable long term performance
- Factory tested to ensure trouble-free operation

















Standard Equipment

- Thin Film Composite Membranes
- Stainless steel multi-stage centrifugal pump
- FRP pressure vessels
- Polypropylene 5M filter housing for K-48B & K-68C, 316SS housing for larger models
- 316SS high pressure piping and Sch. 80 PVC low pressure piping
- Motorized automatic inlet feed valve
- Feed pump throttling valve, SS, or VFD Drive
- Panel mounted SS flow control valves
- Automatic membrane feed flush with permeate flush option
- Low inlet pressure switch
- High pressure switch
- 4) Panel mounted liquid filled pressure gauges: Filter in/out, pump, concentrate
- Panel mounted flowmeters: product & concentrate
- Product TDS (or Conductivity) with digital display readout
- Cleaning ports
- System on/off with 2-level tank floats
- Heavy duty powder coated steel frame

Microprocessor Controller for Automatic Operation

Monitors and/or Controls:

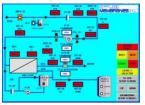
- Inlet valve
- Delayed start-up of high pressure pump
- Feed water flush at system shut-down
- Low pressure and high pressure switches
- On/Off with storage tank level
- Pre-treatment backwash/lockout
- Permeate TDS (or conductivity)
- Feed TDS (or conductivity) & percent rejection
- Water Temperature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



I-ROC150S Controller



PLC Controller

Optional Equipment

- Stainless steel boost or repressurization pump
- pH monitor for feed or for permeate
- Chemical injection
- Pre-treatment: Softener, carbon, media
- VFD Drives

- ORP monitor/controller
- Filter housing upgrade to SS
- Turbidity monitor
- Permeate divert to drain
- UV system, feed or permeate
- FRP membrane housings
- Low energy membranes
- Clean-in-place doubles as a permeate flush system
- PLC with 10" Touchscreen

Ordering Information

	Sy	stem Capa	city	Manahyana	Line Si	zes (NPT, I	nches)	System	Dimensions	(in/cm)	Approx.
Model No.	GPM	GPD	m³/hr	Membrane Elements	Inlet	Perm.	Conc.	Length	Depth	Height	Shipping Weight (Lb/Kg)
K-48B	20	28,800	4.5	4	2	11/2	11/2	120/305	44/112	75/191	1,310/594
K-68C	30	43,200	7	6	2	11/2	11/2	154/391	44/112	75/191	1,425/646
K-98C	40	57,600	9	9	2	11/2	11/2	154/391	44/112	75/191	1,735/787
K-128D	55	79,200	13	12	3	2	2	194/493	44/112	76/193	2,005/909
K-168D	75	108,000	17	16	3	2	2	194/493	44/112	76/193	2,275/1,032
K-208D	95	136,800	22	20	3	3	2	194/493	44/112	76/193	2,645/1,200
K-248D	115	165,600	26	24	4	3	2	194/493	60/152	76/193	2,910/1,320
K-288D	135	194,400	31	28	4	3	2	194/493	60/152	76/193	3,280/1,488
K-368F	175	252,000	40	36	4	3	2	288/731	60/152	76/193	3,795/1,721
K-428F	200	288,000	45	42	4	3	2	288/731	60/152	76/193	5,275/2,392
K-488F	225	324,000	51	48	4	3	2	288/731	60/152	76/193	5,660/2,567
K-548F	250	360,000	57	54	6	4	3	custom	custom	custom	7,140/3,245
K-608F	275	396,000	63	60	6	4	3	custom	custom	custom	8,680/3,945
K-668F	300	432,000	68	66	6	4	3	custom	custom	custom	10,285/4,675
K-728F	325	460,000	74	72	6	4	3	custom	custom	custom	11,890/5,404

Notes and Voltage/ Ordering Information

- Systems rated at 77°F (25°C) using 2000 ppm feed water and approx. 225 psi (16 kg/cm²) pressure. System capacity changes significantly with water temperature and feed TDS. For higher TDS, a water analysis must be supplied and could result in modifications to the system.
- Chlorine must be removed with a carbon filter or with chemical injection prior to the RO System, if present in the feed water.
- Water must be pretreated by softener or antiscalant to avoid scaling the membranes. All dimensions and weights are approximate.

Please add our voltage codes to the end of the model number when ordering: Example: J-84B-236 = 220/230v/3 ph/60 Hz

Voltage Codes:

- **236** = 220 or 230v/ 3ph/ 60hz
- **235** = 220v/3ph/50hz
- **436** = 460 or 480v/ 3ph/ 60 Hz
- 335 = 380 v/3 ph/50 Hz

Single Phase Not Available













applied systems

USA

Maritime Series Watermakers – 150 to 1,600 GPD Seawater Systems

Our Maritime Series Watermakers convert seawater to drinking water. Their compact design makes them ideal for use on yachts, boats, cruise ships and resorts.

Key Features

- Over 40 years of experience in seawater desalination
- Compact powder coated aluminum frame
- · High quality, proven components
- Engineered for reliable, long term performance
- Factory tested to ensure trouble-free operation
- Available with a wide variety of optional accessories to customize and improve system performance (page 6-21)



Standard Equipment

- Thin Film Composite Membranes
- FRP Membrane Housings
- Stainless Steel High Pressure Pump
- Permeate Flow Meter
- Low and High Pressure Shutoff Switches
- Compact Aluminum Frame with Powder Coated Finish
- Stainless Steel Back Pressure Control
- 5 Micron Sediment Filter and Housing
- Differential Gauge Showing Filter Life
- High Pressure Relief Valve
- · Liquid Filled System Pressure Gauge
- Product TDS with Digital Display Readout
- Fresh Water Divert: Monitors Permeate Quality and diverts to drain if it falls below a pre-set set point
- Installation Kit

Microprocessor Controller for Automatic Operation

Monitors and/or Controls:

- Permeate Quality (TDS)
- Water Temperature
- Operating Hours
- Operating Status
- Alarm Condition
- Booster Pump
- Delayed start-up of high pressure pump
- Low and high pressure switches
- On/Off with storage tank level*
- Permeate TDS with alarm set-point
- Fresh water flush
- Automatic product water diversion
- Pretreatment lock-out

Controller Features:

- NEMA 4X Enclosure
- Remote Control Operation (optional)

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- LED Display:

 Backlit LED Display
- Multi-function Keypad
- Visual and Audible Alarm
- Programmable Time Delays, Set-Points and Flush Modes
- Visual Indicator Alarm Light
- Low Pressure Automatic Restart

System Capa Model No.		Capacity	Membrane Elements		Line Sizes (NPT, Inches)			System	(in/cm)	Approx. Shipping	
Model No.	GPD	LPD	Qty.	Size (Dia.×L)	Inlet	Perm.	Conc.	Width	Depth	Height	Weight (Lb/Kg)
Maritime 150	150	567	1	2.5 x 21"	3/4	1/4	1/2	25.1/63.8	19/48.3	12.5/31.6	110/50
Maritime 300	300	1135	2	2.5 x 21"	3/4	1/4	1/2	25.1/63.8	19/48.3	12.5/31.6	115/52
Maritime 400	400	1514	1	2.5 × 40"	3/4	3/8	1/2	44.2/112	19/48.3	12.5/31.6	130/60
Maritime 800	800	3028	2	2.5 × 40"	3/4	3/8	1/2	44.2/112	20/50.8	18/45.7	140/65
Maritime 1200	1,200	4542	3	2.5 × 40"	1	3/8	1/2	44.2/112	20/50.8	18/45.7	150/70
Maritime 1600	1,600	6056	4	2.5 × 40"	1	3/8	1/2	44.2/112	20/50.8	18/45.7	180/80

	System Pressure			Power		Motor		Electrical			Endler
Model No.	Normal PSI/BAR	Max PSI/BAR	kW	Amps	НР	FLA	Туре	Voltage	Freq	Phase	Fully Automated
Maritime 150	700/48	1000/69	0.65	7/3.5	1	12.8	TEFC	115/240	50/60	1	Yes
Maritime 300	800/55	1000/69	0.75	8.1/4	1	12.8	TEFC	115/240	50/60	1	Yes
Maritime 400	700/48	1000/69	0.95	12.5/6.25	1.5	23/11.5	TEFC	115/240	50/60	1	Yes
Maritime 800	750/52	1000/69	1.4	15.5/7.75	2.5	23/11.5	TEFC	115/240	50/60	1	Yes
Maritime 1200	800/55	1000/69	1.5	16.5/8.25	2.5	23/11.5	TEFC	115/240	50/60	1	Yes
Maritime 1600	800/55	1000/69	2.1	22/11	2.5	23/11.5	TEFC	115/240	50/60	1	Yes

Notes and Voltage/Ordering Information

- * Requires the use of optional tank float switches
- All dimensions and weights are approximate and subject to change. Performance Based on 32,000 ppm seawater at 77°F (25°C).
- <u>Voltage:</u> Please add our voltage codes to the end of the model number when ordering. Example: Maritime 150-216.
 - Voltage Codes:
 <u>216</u> = 220/230v, 1ph, 60hz
 <u>116</u> = 110v, 1ph, 60hz
 <u>215</u> = 220/230v, 1ph, 50hz

- 236 = 220 or 230v/3ph/60hz
- **235** = 220v/3ph/50hz



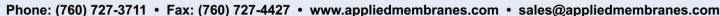


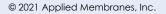












Oyager Modular Watermakers – 150 to 1,600 GPD SWRO

Our Voyager Watermakers convert seawater to drinking water and are designed for applications with limited space. Instead of a traditional onepiece frame, these space-saving systems are sold in several modules which can be installed into smaller spaces and connected together. This design makes them ideal for use on yachts, boats, or cruise ships with limited space.

Key Features

- Over 40 years of experience in seawater desalination
- High quality, proven components
- Engineered for reliable, long term performance
- Factory tested to ensure trouble-free operation
- Compact gauge panel with control valve
- Available with a wide variety of optional accessories to customize and improve system performance (page 6-21)



Standard Equipment

- Thin Film Composite Membranes
- FRP Membrane Housinas
- Stainless Steel High Pressure Pump
- Permeate Flow Meter
- Low and High Pressure Shutoff Switches
- Compact Gauge Panel with Powder Coated Finish
- Stainless Steel Back Pressure Control
- 5 Micron Sediment Filter and Housing
- Differential Gauge Showing Filter Life
- High Pressure Relief Valve
- Liquid Filled System Pressure Gauge
- Product TDS with Digital Display Readout
- Fresh Water Divert: Monitors Permeate Quality and diverts to drain if it falls below a pre-set set point
- Installation Kit

Microprocessor Controller for Automatic Operation

Monitors and/or Controls

- Permeate Quality (TDS)
- Water Temperature
- Operating Hours
- Operating Status
- Alarm Condition
- **Booster Pump**
- Delayed start-up of high pressure pump
- Low and high pressure switches
- On/Off with storage tank level*
- Permeate TDS with alarm set-point
- Fresh water flush
- Automatic product water diversion
- Pretreatment lock-out

Controller Features:

- NEMA 4X Enclosure
- Remote Control Operation (optional)

LED Display:

- Backlit LED Display
- Multi-function Keypad
- Visual and Audible Alarm
- Programmable Time Delays, Set-Points and Flush Modes
- Visual Indicator Alarm Light
- Low Pressure Automatic Restart

Model No.	Model No. System Capacity		Memb	rane Elements	Line Si	izes (NPT, I	nches)		oncentrate Rate	Approx. Shipping Weight
	GPD	LPD	Qty.	Size (Dia.×L)	Inlet	Perm.	Conc.	GPM	LPM	(Lb/Kg)
Voyager 150	150	567	1	2.5 x 21"	3/4	1/4	1/2	1.40	5.3	110/50
Voyager 300	300	1135	2	2.5 x 21"	3/4	1/4	1/2	1.29	4.9	115/52
Voyager 400	400	1514	1	2.5 × 40"	3/4	3/8	1/2	2.23	8.4	130/60
Voyager 800	800	3028	2	2.5 × 40"	3/4	3/8	1/2	2.35	8.9	140/65
Voyager 1200	1,200	4542	3	2.5 × 40"	1	3/8	1/2	2.67	10.1	150/70
Voyager 1600	1 600	6056	4	2.5 × 40"	1	3/8	1/2	4.80	18.2	180/80

Model No.	Amps (DC Systems)		Power (A	C Systems)		AC Motor		AC	Electrica	ı	Fully
Model No.	12v	24v	kW	Amps	HP	FLA	Туре	Voltage	Freq	Phase	Automated
Voyager 150	45	23	0.65	7/3.5	1	12.8	TEFC	115/240	50/60	1	✓ Yes
Voyager 300	45	23	0.75	8.1/4	1	12.8	TEFC	115/240	50/60	1	✓ Yes
Voyager 400	n/a	n/a	0.95	12.5/6.25	1.5	17.2/8.8	TEFC	115/240	50/60	1	✓ Yes
Voyager 800	n/a	n/a	1.4	15.5/7.75	2.5	23/11.5	TEFC	115/240	50/60	1	✓ Yes
Voyager 1200	n/a	n/a	1.5	16.5/8.25	2.5	23/11.5	TEFC	115/240	50/60	1	✓ Yes
Voyager 1600	n/a	n/a	2.1	22/11	2.5	23/11.5	TEFC	115/240	50/60	1	✓ Yes

Notes and Voltage/Ordering Information

- *Requires the use of optional tank float switches See page 6-22 for Dimensions. All dimensions and weights are approximate and subject to change. Performance Based on 32,000 ppm seawater at 77°F (25°C).

 Voltage: Please add our voltage codes to the end of the model number when ordering. Example: Voyager 150-216.
- 116 = 110v, 1ph, 60hz
- <u>216</u> = 220/230v, 1ph, 60hz
- <u>12</u> = 12V DC (Available for Voyager 150 & 300 Only)
- 215 = 220/230v, 1ph, 50hz
- - <u>24</u> = 24V DC (Available for Voyager 150 & 300 Only)













Optional Accessories for Maritime & Voyager Systems

AMI's Maritime and Voyager Watermakers are available with a wide variety of optional add-on accessories. These accessories are designed to customize any system to fit your needs. Many will even work on competing brands of watermakers! Have a special application? We have a team of experienced design engineers that can help with a solution.

Plankton Filter

Removes plankton and other large particles from the feed water to provide additional protection and extended life of the system prefilter. 100 Micron 10" Filter Cartridge in a clear housing on a powder coated mounting bracket. Includes isolation valves for easy cartridge change. Model # A629



Remote Control

Connects to the main control board with a standard Cat5 cable, allowing you to start, stop, and monitor your watermaker from nearly anywhere. Designed for easy installation at a navigation station, galley, or pilothouse. Simple LED's show system status.



Model WMC-1-RMC

Oil Water Separator

Nothing fouls a membrane faster than oil. Protect your RO System & Membranes from oily or polluted water. 20" Filter Cartridge in a Big Blue housing on a powder coated mounting bracket. Includes isolation valves for easy cartridge change.



Membrane Preserving Cartridges

Pickling your system using AMI's exclusive preservative has never been simpler. Install this filter cartridge into your system and preserve the membranes in-place for extended periods of system shut-down. No more messing around with hoses, valves and plumbing connections.





Model # A630

Commercial Prefilter

The commercial sized filter cartridge has a dual-micron rating for extended life, and will provide longer intervals between changing the system prefilter. The outer layer will trap particles larger than 75 Micron, while the inner layer traps particles of 25 Micron. 20" Filter Cartridge in a Big Blue housing on a powder coated mounting bracket. Includes isolation valves for easy cartridge change. Model A711



Membrane Cleaning Cartridges

Just like membrane preservative cartridges shown above, but with chemicals designed to remove scale and bio-fouling from membranes. Clean membranes without removing them from your system or altering valves, hoses or plumbing connections. Reduce downtime, maintain system performance, and prolong membrane life.



10" Std. (removes Scale): C-C2510-A11 10" Std. (removes organics): C-C2510-A22

Media Filter

Removes suspended solids larger than 30 microns to greatly extend prefilter life and provide additional protection to the system. The 8x18" media tank is mounted on a powder coated frame with in/out pressure gauges and a valve for manual backwash. Multiple sizes available for higher flow rates.



Replacement Filters

We carry a large range of filters and housings manufactured under the **M** label. These high quality products use the same materials and produce similar performance specifications as the equivalent filters of other well-known brands.





Other Sizes Available

pH Neutralizer

Neutralizes the pH of the Fresh Water stream from the RO system. AMI calcite filters are self-limiting: they will correct pH only enough to reach a non-corrosive equilibrium, and will not over-correct. 10" Calcite Filter Cartridge in a blue housing on a powder coated mounting bracket. Includes isolation valves for easy cartridge change.

Model H-F251CALCITE

Booster Pump and Raw Water Strainer Increase pressure of incoming feed water for proper system operation. The Raw Water Strainer filters out large debris and particles from feed water, minimizing clogging or damage.





Ultraviolet (UV) System

Ultraviolet Water System for the fresh water stream to sterilize 99.8% of all microorganisms including reproducing bacteria and viruses.



2GPM UV Sterilizer, 12v: 300561 5GPM UV Sterilizer, 12v: 300562

Fresh Water Flush Module

To prolong membrane life by flushing the system with fresh water at each shutdown and every 24 hours. Includes a 10" Big Blue Carbon Filter & Housing to remove chlorine from water. Also includes mounting bracket, piping and electrical connections. Model A633 & A634 (w/Booster Pump)



All assemblies include hardware and mounting equipment for easy upgrade to your new or existing system installation.











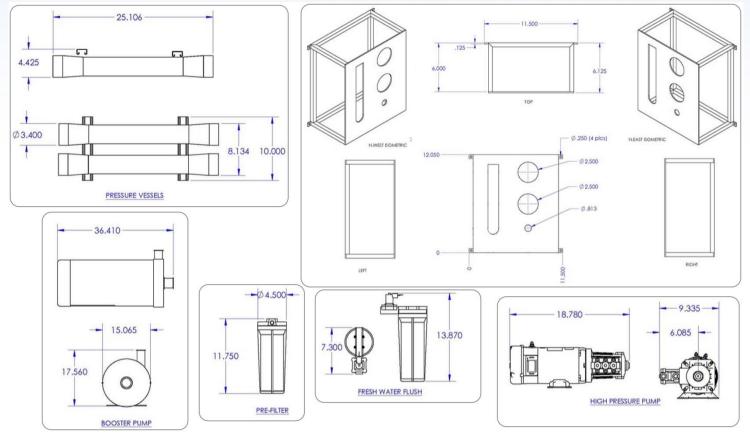


applied[®] Systems

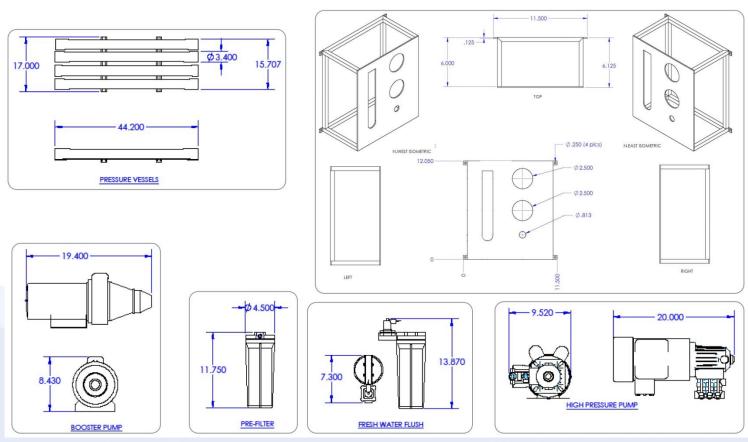


Series SY Watermakers – 150 to 4,000 GPD (0.57 to 15 M³/D) Seawater Systems

Dimensions of Voyager 150 – 300 Modular Watermakers



Dimensions of Voyager 400 – 1600 Modular Watermakers





ries SY Watermakers - 150 to 4,000 GPD (0.57 to 15 M^3/D) Seawater Systems

AMI Watermaker SY series systems convert seawater to drinking water. Their compact design makes them ideal for use on yachts, boats, cruise ships, and resorts.

Key Features

- Over 40 Years of Experience is Reflected in Our Quality
- Compact, Heavy Duty, Powder Coated Frame
- Proven components used throughout the system
- Conservatively engineered for reliable long-term performance
- Factory tested to ensure trouble-free operation



Standard Equipment

- Optional Feed Booster Pump
- Thin Film Composite AMI Membranes
- FRP Membrane Housings
- Stainless Steel High Pressure Pump
- Permeate and Concentrate Flow Meters
- Low and High Pressure Safeguards
- Compact Aluminum Frame with Powder Coated Finish
- Tank Level Controls for Automatic On/Off with Tank Level
- Stainless Steel Back Pressure Control
- 5 Micron Sediment Filter and Housing
- Liquid Filled System Pressure Gauge
- Product TDS with Digital Display Readout
- Optional Fresh Water Divert: Monitors Permeate Quality and Diverts to drain if it falls below a pre-set set point

Microprocessor Controller for Automatic Operation

Monitors and/or Controls:

- Inlet valve
- Delayed start-up of high pressure pump
- Low pressure and high pressure switches
- On/Off with storage tank level
- Permeate TDS with alarm set-point
- Water Temperature
- Operating Hours
- Fresh water flush (flush kit optional)
- Pretreatment lock-out

Controller Features:

- Permeate Quality (TDS)
- Water Temperature
- Operating Hours
- Operating Status
- Alarm Condition



ROC400

LED Display:

- Backlit LED Display
- Multi-function Keypad
- Visual and Audible Alarm
- Programmable Time Delays, Set-Points and Flush Modes
- Visual Indicator Alarm Light
- Low Pressure Automatic Restart

AA a dal Na	System Capacity		Membrane Elements		Line Sizes (NPT, Inches)			System Dimensions (in/cm)			Approx. Shipping
Model No.	GPD	m³/day	Qty.	Size (Dia.×L)	Inlet	Perm.	Conc.	Width	Depth	Height	Weight (Lb/Kg)
SY-12521	150	0.57	1	2.5 × 21	3/4	3/8	3/8	36/91	19/48	17/43	110/50
SY-22521	300	1.1	2	2.5 × 21	3/4	3/8	1/2	36/91	19/48	17/43	110/50
SY-12540	400	1.5	1	2.5 × 40	3/4	3/8	1/2	54/137	32/81	17/43	130/60
SY-22540	800	3.0	2	2.5 × 40	3/4	3/8	1/2	54/137	32/81	17/43	140/65
SY-32540	1,200	4.5	3	2.5 × 40	3/4	3/8	1/2	54/137	32/81	17/43	150/70
SY-42540	1,600	6.0	4	2.5 × 40	3/4	3/8	1/2	54/137	32/81	17/43	180/80
SY-24A	2,000	7.6	2	4 × 40	3/4	1/2	3/4	65/165	43/110	30/76	603/274
SY-34A	3,000	11.3	3	4 × 40	3/4	1/2	3/4	65/165	43/110	30/76	682/310
SY-44A	4,000	15.1	4	4 × 40	3/4	1/2	3/4	65/165	43/110	30/76	759/345

Notes and Voltage/ Ordering Information

- All dimensions and weights are approximate and subject to change. Performance Based on 35,000 ppm seawater at 77°F (25°C). Recovery in the range of 10-15%. Operating pressure 800-1000 psi (57-71 kg/cm²).
- Voltage: Please add our voltage codes to the end of the model number when ordering. Example: SY-12514-236. Voltage Codes: • 116 = 110v, 1ph, 60hz (Not available for SY-24A, SY-34A, SY-44A)

• 216 = 220/230v, 1ph, 60hz

215 = 220/230v, 1ph, 50hz

• **236** = 220 or 230v/ 3ph/ 60hz

• **235** = 220v/3ph/50hz













applied Systems



Series SY Watermakers – 150 to 4,000 GPD (0.57 to 15 M³/D) Seawater Systems

AMI's Series SY Seawater RO Systems are available with a wide variety of optional add-on accessories. All assemblies include hardware and mounting equipment for easy upgrade to your new or existing system installation.

Plankton Filter

Removes plankton and other large particles from the feed water to provide additional protection and extended life of the system prefilter. 100 Micron 10" Filter Cartridge in a clear housing on a powder coated mounting bracket. Includes isolation valves for easy cartridge change. Model # A629



Fresh Water Flush

To prolong membrane life by flushing the system with fresh water at each shutdown and every 24 hours. Includes a 10" Big Blue Carbon Filter & Housing to remove chlorine from water. Also Includes mounting bracket, piping and electrical connections.



Model # A633 and A634 (w/ Booster Pump)

Oil Water Separator

Protects the RO System & Membranes from oily or polluted water. 20" Filter Cartridge in a Big Blue housing on a powder coated mounting bracket. Includes isolation valves for easy cartridge change.

Model # A630



Remote Control Panel

The Touch Pad Remote Control unit allows for remote starting & stopping of the watermaker, alarm & monitoring.

- Permeate TDS 60Hz Part# A242, 50Hz Part# A243
- Feed or Permeate pH 60Hz Part# A244, 50Hz Part# A245



Commercial Prefilter

The commercial sized filter cartridge has a dual-micron rating for extended life, and will provide longer intervals between changing the system prefilter. The outer layer will trap particles larger than 75 Micron, while the inner layer traps particles of 25 Micron. 20" Filter Cartridge in a Big Blue housing on a powder coated mounting bracket. Includes isolation valves for easy cartridge change.



Membrane Preserving Cartridges

Preserve system and membranes inplace for extended periods of system shut-down.



Clean membranes without removing them from your system, reduce downtime, maintain system performance at a higher level, and prolong membrane life.

10" Std. (removes Scale): C-C2510-A11 10" Std. (removes organics): C-C2510-A22



Media Filter

Removes suspended solids larger than 30 microns to greatly extend prefilter life and provide additional protection to the system. The 8x16" media tank is mounted on a powder coated frame with in/out pressure gauges and a valve for manual backwash.

Model # W-MB0818



Replacement Filters

We carry a large range of filters and housings manufactured under the label. These high quality products use the same materials and produce similar performance specifications as the equivalent filters of other well-known brands.



pH Neutralizer

Neutralizes the pH of the Fresh Water stream from the RO system. AMI calcite filters are self-limiting: they will correct pH only enough to reach a non-corrosive equilibrium, and will not over-correct. 10" Calcite Filter Cartridge in a blue housing on a powder coated mounting bracket. Includes isolation valves for easy cartridge change.

Ultraviolet (UV) System

Ultraviolet Water System for the fresh water stream to sterilize 99.8% of all micro-organisms including reproducing bacteria and viruses.

See website for our full line of UV System products



Modular Configuration Available

Also available in space-saving modular configuration. See our Voyager Modular brochure for details

















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.



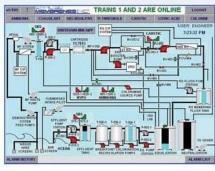
Key Features

- Over 40 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

























Series S - 2,000 to 132,000 GPD Seawater Desalination Systems

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 \$-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:

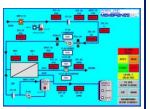
- Inlet valve
- Delayed start-up of high pressure pump
- Permeate water flush at system shut-down
- Low pressure and high pressure switches
- On/Off with storage tank level
- Pre-treatment backwash/lockout
- Permeate TDS
- Feed TDS) and percent rejection
- Water Temperature
- Operating hours
- RO tank 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 (\$98C and smaller)
- PLC with 10" Touchscreen

Ordering Information

As a shall bla	Sy	System Capacity			Membrane Elements		zes (NPT, I	nches)	System I	Dimensions	(in/cm)	Approx. Shipping
Model No.	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	11/2	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













Series WMF – 2,200 to 20,000 GPD Wall Mount UF Systems



Ultrafiltration Water Purification

Designed to produce clean, purified water from tap or well water, these wall-mounted systems use high efficiency ultrafiltration membranes. The filtered product water is used in commercial and residential applications such as water stores, RO pretreatment, whole house, laboratories, bottled water and other similar applications.

Key Features

- Over 40 Years of Experience is Reflected in Our Quality
- Fine filtration to 0.02 microns for bacteria, viruses and turbidity treatment
- Low operating pressure and high efficiency
- Reliable and durable UF Membranes for high membrane integrity
- Compact, heavy duty, powder coated frame
- Factory tested to ensure trouble-free operation
- Simple installation and automatic operation



Standard Equipment

- Hollow fiber ultrafiltration membranes
- PVC membrane housings/vessels
- Liquid filled system pressure gauge
- Corrosion resistant powder coated durable steel frame
- Boxed and palletized for shipment
- Electric actuated control valves
- Automated system controller
- Inlet isolation valve

Controller for Automatic Operation

Controller Features:

- Simple operation, easy to use
- Automatic operation including membrane backwash/cleaning
- Manual backwash button

Indicator Lights:

- In service
- Backwash flush clean mode

Madal Na	System Capacity		Membrar	ne Elements	Line Size	System Dimensions (in/cm)			
Model No.	GPD	m³/day	Qty.	Size (Dia.×L)	Inlet, Filtrate, Drain (NPT)	Length	Depth	Height	
WMF-22521A-116	2,200	8	2	2.5 × 21	1/2''	28/71	12/30	26/66	
WMF-42521A-116	4,300	16	4	2.5 × 21	1/2''	35/89	12/30	26/66	
WMF-24A-116	13,000	50	2	4.0 × 40	3/4''	29/73	12/30	52/132	
WMF-44A-116	22,000	83	4	4.0 × 40	1"	36/91	12/30	52/132	

Notes and Voltage/ Ordering Information

- All dimensions and weights are approximate.
- Capacity Basis: 24 hrs/day
- Systems rated at: 77°F (25°C) less than 1,500 ppm total dissolved solids (TDS) city water or natural groundwater well
- Minimum feed pressure to UF System: 40 PSI.
- **Voltage:** 120 volts, single phase, 60 hertz. 220 volt available upon request
- System capacity changes significantly with water temperature
- Media pretreatment recommended for source water turbidity reduction, typically for well water.

Pretreatment and Post Treatment Options

System Model No.	Carbon Filter Post Treatment	UV Disinfection Post Treatment	Multi-Media Filter Pretreatment	1 Micron Filter Pretreatment	Pressure Tank
WMF-22521A-116	A725	S2Q-PA	W-MB844ET-US	A704-10-1	A612-40
WMF-42521A-116	A725	S2Q-PA	W-MB844ET-US	A704-10-1	A612-40
WMF-24A-116	A725BB	S5Q-PA	W-MB1665ET-US	A704-20-1	A612-80
WMF-44A-116	A725BB	S8Q-PA	W-MB1665ET-US	A704-20-1	A612-80

















Ultrafiltration Water Purification

Designed to produce clean, purified water from tap or well water, these wall-mounted systems use high efficiency ultrafiltration membranes. The filtered product water is used in residential POE/POU applications such as water stores, RO pretreatment, whole house, laboratories, bottled water and other similar applications.

Key Features

- Over 40 years of experience is reflected in our quality
- Fine filtration to 0.02 microns for bacteria, viruses and turbidity treatment
- Low operating pressure and high efficiency
- Reliable and durable UF Membranes for high membrane integrity
- Compact, heavy duty, powder coated frame
- Factory tested to ensure trouble-free operation
- Simple installation and automatic operation



Standard Equipment

- Hollow fiber ultrafiltration membranes
- PVC membrane housings/vessels
- Liquid filled system pressure gauge
- Corrosion resistant powder coated durable frame
- Boxed and palletized for shipment
- Electric actuated control valve system
- Automated system controller
- Inlet isolation valve

Controller for Automatic Operation

Controller Features:

- Simple operation, easy to use
- Automatic operation including membrane flush/cleanina
- Manual flush button

Indicator Lights:

- In service
- Flush clean mode

Madal Na	System Capacity		Membrar	e Elements	Line Size	System Dimensions (in/cm)			
Model No.	GPD	m³/day	Qty.	Size (Dia.×L)	Inlet, Filtrate, Drain (NPT)	Length	Depth	Height	
WMZ-12521A-116	1,600	6.06	1	2.5 × 21	1/2''	28/71	12/30	26/66	
WMZ-14A-116	10,000	37.85	1	4.0 × 40	3/4''	18/46	12/30	52/132	

Notes and Voltage/ Ordering Information

- All dimensions and weights are approximate.
- Capacity Basis: 24 hrs/day
- Systems rated at: 77°F (25°C) less than 1,500 ppm total dissolved solids (TDS) city water or similar (well)
- Minimum feed pressure to UF System: 40 PSI.
- Voltage: 120 volts, single phase, 60 hertz. 220 volt available upon request
- System capacity changes significantly with water temperature
- Media pretreatment recommended for source water turbidity reduction, typically for well water.

Pretreatment and Post Treatment Options

System Model No.	Carbon Filter Pre & Post Treatment	UV Disinfection Post Treatment	Multi-Media Filter Pretreatment	1 Micron Filter Pretreatment	Pressure Tank
WMZ-12521A-116	A725	S2Q-PA	W-MB844ET-US	A704-10-1	A612-40
WMZ-14A-116	A725BB	S5Q-PA	W-MB1665ET-US	A704-20-1	A612-80

Typical UF Systems include Sediment Prefilter and Carbon Filter













Eeries WMR – 1,600 to 10,000 GPD WM Polishing UF Systems

Ultrafiltration Water Purification – Polishing Filtration

Designed to produce clean, purified water from tap/city water, these wall-mounted systems use high efficiency ultrafiltration membranes. The filtered product water is used in residential POE/POU applications such as water stores, RO pretreatment, whole house, laboratories, bottled water and other similar applications.

Key Features

- Over 40 Years of Experience is Reflected in Our Quality
- Fine filtration to 0.02 microns for bacteria, viruses and turbidity treatment
- Low operating pressure and high efficiency
- Reliable and durable UF Membranes for high membrane integrity
- Factory tested to ensure trouble-free operation
- Simple installation and automatic operation



Standard Equipment & Features

- Hollow fiber ultrafiltration membranes
- PVC membrane housings/vessels
- Liquid filled system pressure gauge
- Wall Mount Brackets
- Boxed and palletized for shipment

- Electric actuated control valve system
- Inlet isolation valve
- Automated flush cleaning system
- Simple and reliable operation
- Easy setup and operation

Ma dal Na	System Capacity		Membrane Elements		Line Size	System Dimensions (in/cm)			
Model No.	GPD	m³/day	Qty.	Size (Dia.×L)	Inlet, Filtrate, Drain (NPT)	Length	Depth	Height	
WMR-12521A-116	1,600	6.06	1	2.5 × 21	1/2''	28/71	12/30	26/66	
WMR-14A-116	10,000	37.85	1	4.0 × 40	3/4''	18/46	12/30	52/132	

Notes and Voltage/ Ordering Information

- All dimensions and weights are approximate.
- Capacity Basis: Peak capacity noted for high quality source water
- Systems rated at: 77°F (25°C) less than 1,000 ppm total dissolved solids (TDS) city tap water
- Minimum feed pressure to UF System: 40 PSI.
- **Voltage:** 120 volts, single phase, 60 hertz. 220 volt available upon request
- System capacity changes significantly with water temperature
- Sediment filter pretreatment recommended for source water turbidity reduction.

Pretreatment and Post Treatment Options

System Model No.	Carbon Filter Pre & Post Treatment	UV Disinfection Post Treatment	Multi-Media Filter Pretreatment	1 Micron Filter Pretreatment	Pressure Tank
WMR-12521A-116	A725	S2Q-PA	W-MB844ET-US	A704-10-1	A612-40
WMR-14A-116	A725BB	S5Q-PA	W-MB1665ET-US	A704-20-1	A612-80

Typical UF Systems include Sediment Prefilter and Carbon Filter













Series HF – Hollow Fiber Ultrafiltration (UF) Systems 10 to 3,000 GPM • Engineered Systems to 150 MGD

Advantages of Ultrafiltration

- Low fouling membrane modules
- Excellent filtration performance with high flux
- High chemical resistance and temperature tolerance for effective membrane cleaning
- Very fine nominal pore diameter (0.02 μm)
- High removal efficiency of bacteria & viruses
- Dead-end or concentrate bleed flow capabilities
- Can be periodically back washed and air scoured to improve performance and extend operating life by removing the fouling layer
- Simple, vertical, modular design allows low cost, compact systems
- UF Outside-In or Inside-Out Configuration allows for less plugging and higher solids loading, higher flow area and easier cleaning

Key Features

- Over 40 Years of Experience is Reflected in Our Quality
- Heavy duty powder coated corrosion resistant frame
- SS High pressure components, SS Pump
- Touch Screen PLC Operation
- Conservatively engineered for reliable long term performance
- Factory tested to ensure trouble-free operation





Applied Membranes' Ultrafiltration UF Systems are Available in either Outside-In and Inside-Out Configurations.

Outside-In configuration UF Systems use DOW UF Low fouling Hydrophilic Polyvinylidenefluoride (H-PVDF) Hollow Fiber Ultrafiltration Membranes.

Inside-Out configuration UF Systems use Inge dizzer® XL Low fouling Hydrophilic MPES Hollow Fiber Ultrafiltration Membranes. Dizzer XL UF Membranes are provided with Multibore® technology for superior membrane integrity (robust membrane).





















Series HF – Hollow Fiber Ultrafiltration (UF) Systems 10 to 3,000 GPM • Engineered Systems to 150 MGD

Ultrafiltration (UF) Systems come complete and are skid mounted. These systems are tested before shipment.

Standard Equipment

- Self-cleaning automatic pre-filter(s)
- Hollow Fiber UF Membrane Modules
- Automatic valves for feed backwashing
- 316SS Feed pump with VFD
- Solenoid valve for air scour for O/I UF (Air compressor optional)

- Chemical injection pumps (3)
- pH transmitter
- Flow transmitters: Filtrate and Backwash
- Pressure gauges with transmitters (4)
- 316SS Backwash pump with VFD
- PLC Operator Inteface

Ordering Information

Inside-Out	Outside-In Model No.	System Capacity			Membrane	Line Sizes (NPT, Inches)			System Dimensions (in/cm)			Approx. Shipping Weight
Model No.		GPM	GPD	m³/hr	Elements	Inlet	Filtrate	Backwash	Length	Depth	Height	(Lb/Kg)
HF60-11	HF60-1IE	10	14,4000	2.3	1	1.5	1.5	1.5	60/152	30/76	76/193	1,000/454
HF60-4I	HF60-4IE	40	57,600	9.0	4	4	4	4	80/203	30/76	76/193	1,500/680
HF60-10I	HF60-10E	100	144,000	22.7	10	4	4	4	110/279	50/76	114/290	3,000/1,360
HF60-14I	HF60-14E	140	201,600	31.8	14	6	6	6	140/356	50/76	114/290	4,200/1,905
HF60-18I	HF60-18E	180	259,200	40.9	18	6	6	6	180/457	50/76	114/290	5,500/2,495
HF60-22I	HF60-22E	220	316,800	50.0	22	6	6	6	220/559	50/76	114/290	6,300/2,858

Optional Equipment

- Holding tanks for feed, backwash and filtrate
- Chemical tanks for chemical injection
- Air compressor for air scour
- Clean-in-Place system (CIP)

Notes

- All dimensions and weights are approximate.
- Based on 77 deg. F (25 deg. C.) operating temperature + or 10 Deg. F (please advise if temperature is out of this range)
- Operating maximums: 75 PSI applied pressure; 20 PSI transmembrane pressure; 300 NTU of instantaneous turbidity; 200 PPM chlorine @ 200,000 PPM hours (< 50 NTU, typical)
- Capacity basis: 24 hour

Voltage/ Ordering Information

Please add our voltage codes to the end of the model number when ordering.

Example: HF60-22E-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



















Series PW – 1,800 to 9,500 GPD Packaged Water Purification

Applied Membranes offers a complete mini water purification plant fully assembled on a single skid. From pretreatment to reverse osmosis to post treatment and storage tank, the package is ready to produce high quality water for many applications. These include water stores, water jet cutting machines, pharmaceutical, manufacturing and other industrial uses.

We use high quality components and take pride in the overall quality and reliability of our systems. All systems are thoroughly tested before shipment.



















Series PW – 1,800 to 9,500 GPD Packaged Water Purification

Standard Equipment:

- 1. Granulated Carbon Filter with Auto Backwash
- 2. Water Softener with Auto Regeneration
- 3. Reverse Osmosis System:
 - 5 Micron 20" Sediment Filter and Housing
 - Thin Film Spiral Wound Elements
 - Stainless Steel Pressure Vessels
 - Low Pressure Switch
 - Automatic Feed Water Shut-Off
 - High Pressure Pump
 - Liquid Filled Pressure Gauges (3) For Filter In/Out and System Pressure
- Permeate and Concentrate Flowmeters
- Concentrate Recycle Valve
- Concentrate Recycle Flowmeter
- TDS Monitor, Digital, Panel Mounted
- Temperature Monitor
- Flow Control and Back-Pressure Regulator
- Powder Coated Skid
- Auto System Operation with Level Controls
- 4. Delivery System Complete with a Repressurization Pump, Piping, Controls and a 40 Gallon Pressurized Storage Tank
- 5. 1 Micron Extruded Carbon Post Filter
- 6. Ultraviolet System to Disinfect the Treated Water
- 7. Ozone System Includes Air Preparation, Ozone Generator and Other Equipment Necessary for Ozonating the Treated Water

Ordering Information

Model No.	Produc	Syster	n Dimensions (i	Approx. Shipping Weight		
	GPD	m³/day	Length	Depth	Height	(Lb/Kg)
PW-1500	1,800	6.8	96/244	34/86	81/206	920/420
PW-3000	3,600	13.6	96/244	34/86	81/206	1275/580
PW-4500	5,000	18.9	96/244	34/86	81/206	1375/625
PW-6000	6,500	24.6	96/244	34/86	81/206	1500/680
PW-8000	8,000	30.2	96/244	34/86	81/206	1550/703
PW-10000	9,500	35.9	96/244	34/86	81/206	1650/748

Optional Equipment

- Booster Pump
- Multimedia Filter
- ORP Monitor

- PE Storage Tanks, with Vent Filter & Level Controls
- SS Media Tank Jackets
- Crating*

*Recommended Minimum Option

Notes

- All dimensions and weights are approximate.
- Systems rated at 77°F (25°C) using 1000ppm sodium chloride solution and 200psi (14 kg/cm²) pressure. System capacity changes significantly with water temperature. For higher TDS, a water analysis must be supplied and could result in modifications to the system.

Voltage/ Ordering Information

Please add our voltage codes to the end of the model number when ordering.

Example: PW-1500-216 = 220v / 1 ph / 60 hz

• 116 = 110v, 1ph, 60hz (up to L-24A only) Voltage Codes:

• <u>216</u> = 220/230v, 1ph, 60hz

• <u>215</u> = 220/230v, 1ph, 50hz

• 236 = 220 or 230v/ 3ph/ 60hz

• <u>235</u> = 220v/3ph/50hz













eries EDI – Electrodeionization Water Purification Systems

EDI Series Systems are produced by Applied Membranes to polish the permeate from a reverse osmosis system. The quality of the product from an AMI EDI system will depend on the incoming feed water quality to the EDI system. Product quality up to 18 megaohms is possible with these systems.

The EDI System is superior to a conventional mixedbed deionization system both in ease of operation and maintenance. In addition, no chemicals are used for regeneration.

The EDI Systems are modular, so they can be designed for various capacities and easily expanded when required.

EDI Systems are used in applications such as ultrapure water, USP grade water, water for injectibles (WFI), and removing trace quantities of contaminants.



















Series EDI – Electrodeionization Water Purification Systems

Standard Equipment

EDI Systems come complete and are skid mounted. These systems are tested before shipment. The main components included are:

• EDI Cells

Flow Meters

- Pressure Gauges
- Controller
- Power SupplyFlow Switch
- Resistivity Monitor
- All Safeguards & Alarms

- Incoming water conductivity meter
- Auto incoming water diverter valves w/controls
- Auto product water diverter valves w/controls

Model No.	System C	System	n Dimensions (Approx. Shipping		
	GPM	Liters/Min	Length	Depth	Height	Weight (Lb/Kg)
EDI-1XL100	0.25 – 0.75	1 – 3	23/59	26/66	36/91	240/110
EDI-1XL200	0.5 – 1.5	2 – 6	23/59	26/66	36/91	250/114
EDI-1XL300	1.5 – 3	6 – 11	23/59	26/66	36/91	260/118
EDI-1XL400	3-7	11-27	23/59	26/66	36/91	270/123
EDI-1XL500	6-10	25-38	23/59	26/66	36/91	340/155
EDI-2XL500	12-20	45-76	23/59	26/66	36/91	520/236
EDI-4XL500	24-40	91-151	60/152	48/122	72/182	680/310
EDI-6XL500	36-60	136-227	60/152	48/122	72/182	780/354

Notes

- Final product water quality will vary with the incoming RO permeate water quality and the temperature of the water.
- The incoming RO permeate must meet the specified quality requirements.

Voltage/ Ordering Information

Please add our voltage codes to the end of the model number when ordering.

Example: EDI-1XL200-**216** = 220v/1ph/60hz

EDI-1XL100 to EDI-1XL500 are available in single phase only

Voltage Codes: 116 = 110v/1ph/60hz **216** = 220 or 230v/1ph/60hz **215** = 220v/1ph/50hz

EDI-2XL500 to EDI-6XL500 are available in three phase only

Voltage Codes: • 236 = 220 or 230V/ 3ph/ 60hz • 235 = 220V/3ph/50hz • 436 = 460 or 480V/ 3ph/ 60 Hz • 335 = 380V/3ph/50 Hz

















Series LC - Membrane Degasifier Systems

Membrane Contactor Degasifier Systems

AMI membrane contactor degasifier systems use Liqui-Cel ® microporous hollow fiber membranes to remove gases from liquids. During typical operation, liquid flows over the shellside (outside) of the hollow fibers while a vacuum is applied to the lumenside (inside) of the fibers. The dissolved gas is forced through the membrane pores and is carried away by the vacuum pump.

Uses

- Deoxygenation
- Decarbonation
- Carbonation
- Nitrogenation
- Hydrogenation
- Debubbling
- Hydrogen Sulfide Removal
- VOC Removal
- Osmotic Distillation
- Liquid/Liquid Extraction
- Humidification Gases
- Dealcoholization
- Ammonia Removal
- Many More

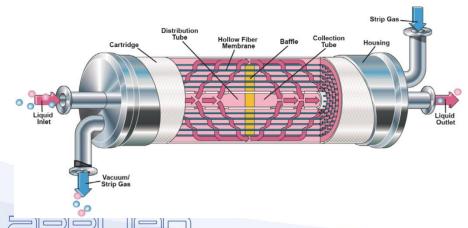
Key Features

- Over 40 years of water treatment experience is reflected in our quality
- Modular design offering flexibility for meeting future capacity
- Maximized surface area/volume for high performance and space efficiency
- Compact, heavy duty, powder coated frame
- Factory tested to ensure trouble-free operation
- Simple installation and operation

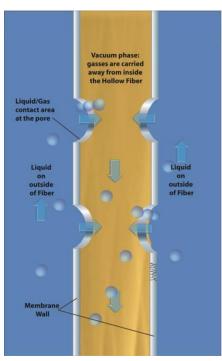
Applications

- Semiconductor/Microelectronics
- Boiler Feedwater
- Power Generation
- Flat Panel/TFT Displays
- Food & Beverage
- Pharmaceutical
- Ink Jet Inks
- Offshore injection water

- Medical/Analytical
- General Industrial
- Solar Panels
- Aquifier Storage
- Photographic
- Plating/Coatings
- Eye Care Products
- Many More



















applied[®] Systems

Series LC - Membrane Degasifier Systems

Standard Equipment

- Liqui-Cel® Membrane Contactors
- Air Blower
- Inlet Air Filter
- Inlet Air Flow Meter
- Air Flow Control Valve
- Liquid Trap

- Vacuum Relief Valve
- In & Out Water Pressure Gauges
- Water Pressure Relief Valve
- In & Out Isolation Valves
- Drain Valve

Ordering Information

	System Capacity		Membrane Contactors			System D	Approx.		
Model No.	GPM	m³/hr	Qty.	Size (Dia.×L)	Line Size (NPT, Inches)	Width	Depth	Height	Shipping Weight (Lb/Kg)
LC8X20	5-50	1.1-11	1	8" × 20"	1"	20/51	28/71	66/168	400 lbs
LC28X20	50-100	11-23	2	8" × 20"	2"	20/51	28/71	66/168	450 lbs

Optional Equipment

Please note that optional equipment will increase system dimensions and/or weight.

- pH Sensor (A225)
- PLC Option (A350)

- Flow Sensor/Transmitter (A153)
- Crating

Notes

- All dimensions and weights are approximate.
- System feed water must be pretreated down to 5 micron filtration level.
- Minimum and maximum feed flows as specified.
- Systems rated at 77°F (25°C) using RO permeate water. System capacity changes with degasification requirements. For higher degas requirements, a water analysis must be supplied and could result in modifications to the system.
- RO system is recommended for pretreatment. Contact us for additional details on your specific application.

Voltage/ Ordering Information

Please add our voltage codes to the end of the model number when ordering. Example: 1-116 = 110v, 1 ph, 60 hz.

Voltage Codes:

• 116 = 110v, 1ph, 60hz

• **216** = 220/230v, 1ph, 60hz

• **215** = 220/230v, 1ph, 50hz

Three Phase Not Available













Solar UF and RO Systems

Powered only by Solar Energy, Applied Membranes' Solar Ultrafiltration and Reverse Osmosis systems treat river and well water to produce water for drinking, agriculture and other uses.

Hundreds of these systems are currently in operation treating water with TDS of up to 10,000 PPM and product flow of up to 50 gallons/minute. Designed to produce the maximum of treated water with the lowest possible energy these systems are compact and made for outdoor use.





















Membrane Cleaning Systems

Membrane cleaning systems are designed to be used with any RO system to clean membranes without removing them from the system. Our cleaning systems are provided with hoses and quick disconnect fittings to allow connection to the membrane system.

Standard Equipment:

- On/Off Switch
- 316 Stainless Steel Centrifugal Pump
- 5 Micron Cartridge Filter(s)
- Filter Housing: Polypropylene for Y-CS20 & Y-CS40 316 Stainless Steel for Y-CS100 & Y-CS220
- 316 Stainless Steel Gauge
- Quick Disconnect Fittings
- Temperature Gauge

- Flow Meter
- TEFC Pump Motor
- Recycle Loop with Valve
- Solution Tank (Polyethylene) with low level tank safe-guard
- Flexible Braided Hose
- Heavy duty castor wheels

Optional Equipment

- Immersion Heater, Coated Stainless Steel
- Hand-held Quality Monitor

• Crating (Recommended minimum option)

Model No.	PV's Cleaned in Parallel (#/Dia)	Inlet/Outlet (Inches)	Tank Size (Gals/Lit)	Flow (GPM)		Pump Size		System Dimensions (in/cm) (without casters)			Approx. Shipping
				Min	Max	GPM	PSI	Length	Depth	Height	Weight (Lb/Kg)
Y-CS20	4/2.5" or 2/4"	1	100/380	10	25	20	40-60	51/130	36/90	58.5/149	450/205
Y-CS40	4/4" or 1/8"	11/2	200/760	40	50	40	40-60	64/163	39/99	76.5/194	600/270
Y-CS60	6/4" or 2/8"	11/2	200/760	60	75	60	40-60	64/163	39/99	76.5/194	600/270
Y-CS100	2 to 3/8"	2	500/1895	100	125	100	40-60	84/213	55/140	90.5/230	650/295
Y-CS150	4/8"	3	500/1895	150	175	150	40-60	84/213	55/140	97.5/248	720/325
Y-CS220	4 to 6/8"	3	500/1895	220	250	220	40-60	84/213	55/140	97.5/248	790/360





Voltage/ Ordering Information

Please add our voltage codes to the end of the model number when ordering.

Example: Y-C100-236 = 220v / 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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Extensive Experience In Specialty Systems



Applied Membranes' experience extends beyond standard water purification systems. We have supplied complete systems for dialysis, ultrapure water, boiler feed water, USP grade water, water for Injectables (WFI), water reuse, dye recovery, ground water remediation, mobile water purification systems and many more. We also provide a broad selection of Pilot Plant Testing Systems available for rent at your facility.

We also supply specialty membranes to OEMs for use in applications such as oily water treatment, electro-coat paint, dairy, sugar concentration, juice concentration, and other applications



AMI welcomes the opportunity to work with you to fulfill your specific filtration needs.

Pilot Plant Testing Systems

Pilot Plant Units Available for Leasing

AMI offers a select number of pilot systems available for rental to use for testing your application at your facility.

Pilot Plant Units Available for Purchase

Applied Membranes can engineer and build a pilot testing plant to fit your specific application. We have produced pilot plants using Reverse Osmosis, Ultrafiltration, Nanofiltration, or Microfiltration technology for testing applications such as medical, pharmaceutical, USP, dairy, electro-coat paint, and more.





















Extensive Experience In Specialty Systems

USP Systems

Our USP grade water systems, for laboratory and pharmaceutical applications, are designed to meet USP specifications.



Specialty Systems

16" x 60" Membrane Application



Military Water Treatment Systems

- Military compliant water purification systems
- Containerized seawater & brackish water RO Systems
- Portable trailer-mounted RO units







Portable Water Purification







Industry Leader in RO Expertise and Membrane Applications Since 1983™











System Containerization – 20 & 40 Ft. High-Cubes

ISO container with Insulation and Fine Internal and External Finishing







20 Ft. & 40 Ft. Containerization Includes:

- ISO containers 40 ft. & 20 ft. long, high-cube configurations
- Double cargo doors on one end and man entry door on side
- Interconnecting plumbing
- PVC conduit for electrical wiring and other wires contained in wire-ways
- Central connection point(s) for all plumbing connections
- Ceiling lighting
- Two-ton commercial air conditioning unit (2 Qty. per 40' container, 1 Qty per 20' container)
- Epoxy paint outside and on inside floor
- Insulation throughout including walls, cargo doors and ceiling
- White FRP interior textured wall paneling for fine finished look
- FRP flooring grid in walkways
- Corrosion resistant hardware
- Powder coated strut and painted exposed surfaces
- PVC plates under chemical pumps
- Chemical fan fume hood and box
- Local ON/OFF switches for chemical tank mixers (mixers optional)
- Double containment tubing for chemical lines
- Media tanks and permeate line manifolds in hardpiped PVC
- Commercial door locks
- Vibration isolation for HP pump(s)
- Utility water line and valve for water use inside container
- Waterproof valve and instrument tags for all major equipment, instruments and valves
- Operating manual rack holder near instrument panel
- Illuminated Exit sign















Mineral Injection Systems

Applied Membranes mineral injection systems are designed to inject minerals in to drinking water. One to four minerals can be injected at one time. The systems are designed for flow rates from 1 to 30 gallons per minute. Larger flows are possible by adding the increased line size option below. A typical system would inject three minerals: calcium, potassium and magnesium. The injection systems meet all IBWA, FDA and health code requirements.

Key Features

- Over 40 Years of Experience is Reflected in Our Quality
- Proven components used throughout the system
- Conservatively engineered for reliable long term performance
- Factory tested to ensure trouble-free operation



Model No.	Qty. of Chemical Tanks	Metering	Line Size	
	Gry. of Chemical fanks	GPD	PSI	Lille 312e
Y-CHEMSK1	1	24	60	Up to 2"
Y-CHEMSK2	2	24	60	Up to 2"
Y-CHEMSK3	3	24	60	Up to 2"
Y-CHEMSK4	4	24	60	Up to 2"

Standard Equipment: Typical equipment included is listed below

- Skid mounted on a heavy duty powder coated frame
- Adjustable Liquid metering pumps
- Solution Mixers
- Solution Tanks, Food-Grade Polyethylene
- In-Line static mixer

- TDS monitor with set-point and alarm
- Schedule 80 PVC and Polyethylene Piping
- Connect directly into main piping, 1.5" to 2" standard
- NEMA 4 Electrical Enclosure
- Low level tank safe-guard

Optional Equipment

- 2.5" to 4" Line Size for higher flows
- pH monitoring

Crating

Voltage/ Ordering Information

Please add our voltage codes to the end of the model number when ordering.

Example: Y-CHEMSK3-116 = 110v / 1 ph / 60 hz.

Voltage Codes:

- <u>116</u> = 110v, 1ph, 60hz
- **216** = 220/230v, 1ph, 60hz
- <u>215</u> = 220/230v, 1ph, 50hz
 Three Phase Not Available

