

LB-400 - Stationary Modular Water Solution



PRODUCT SPECS

Article Number	LB-400
Salt Rejection	99.5%
Technology	High energy-efficient Reverse-Osmosis (RO)
Production per Day	1.5 m ³ /d (400 gpd)
Production per Hour	64 lph (17 gph)
Recovery Rate	10%
Feed Water Source	Fresh, brackish, seawater
Voltage Options	24v DC, 48v DC, 110v AC, 220v AC
Power	300-600w (contingent on feed pump selection)
Watt per Liter	4
Water Temperature Limits	Max 37°C (110°F) / Min 2°C (36°F)
Weight	34.5 kg (76 lbs)
Dimensions	120 cm x 59 cm x 46 cm (47" x 23" x 18")

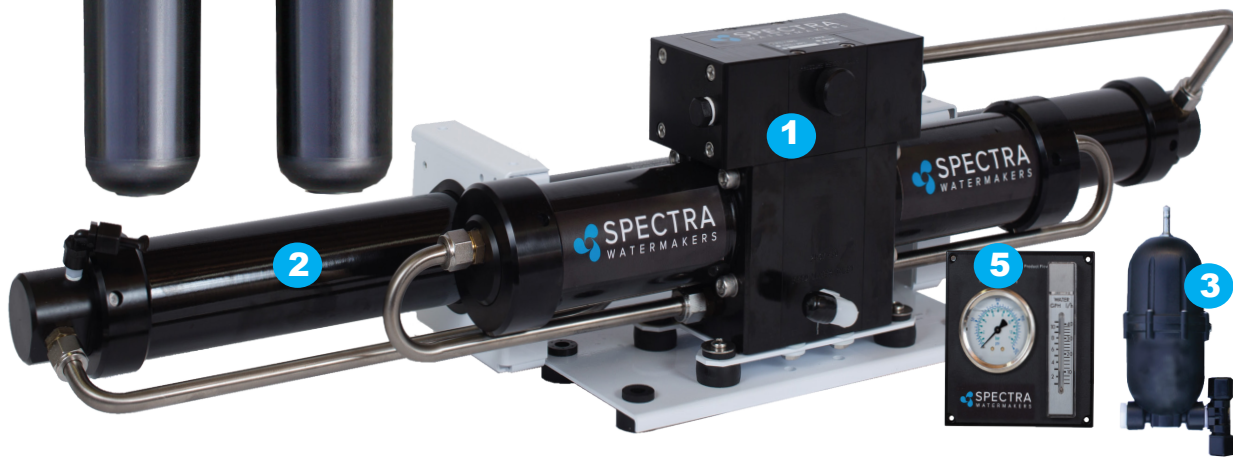
FEATURES

- Simple analog controls and gauges, no electronics
- Super efficient, requiring as little as 350 watts to purify seawater, ideal for solar and wind power
- Fixed water recovery ratio for easy operation, optimized for long RO membrane life
- Perfectly pairs with wind or solar power due to high energy efficiency
- Patented energy recovery design and automated controls eliminate the need for constant monitoring by an operator
- Composite construction for superb corrosion resistance
- Membranes are protected from overpressure and scaling by design and can last 8-10 years or more with proper maintenance
- Spectra's renowned customer service and support with technicians available by Skype, phone and e-mail in North America and Europe

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1	Clark Pump Energy Recovery Device
2	Reverse Osmosis Membrane
3	Pressure Accumulator
4	Prefilter Assembly
5	Flow and Pressure Gauge
6	DC Power Connection
7	Mil-Spec Plastic Case
8	Flow and Pressure Gauges



SYSTEM SHIPPING LIST

System
LB-400
Included Components
Clark Pump pressure intensifier, 10% recovery rate
Spectra 1000 psi composite pressure vessel with SW30-2540 seawater RO membrane
2.5" X 10" 5 and 20 micron pre-filters (1)
Analog gauges and controls
Modular construction for versatile installation options.
Product, Feed and Brine hoses
Feed Pump is not included with this system
Installation Kit
Filter Wrench
Hand-held TDS/Salinity Meter
User Manual

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SPARE PARTS AND CONSUMABLES

Article Number	Product
FT-FTC-5	5 micron cartridge filters
FT-FTC-20	20 micron cartridge filters
FT-FTC-CC	10" Carbon Block Filter Cartridge
FT-FTC-CAL	Calcite filter cartridge 10" BB
KIT-HP-S&O	Seal and O-ring kit for Clark Pump
KIT-HP-10UD	10% Clark Pump rebuild kit
KIT-CHEM-SC2	Spectra alkaline membrane cleaner
KIT-CHEM-SC3	Spectra acid cleaner
KIT-CHEM-SC1	Spectra membrane preservative

OPTIONAL COMPONENTS

Article Number	Product	Description
FT-MD-AG14X65	Multi-media Prefiltration System	Electronic media valve heads allow for autonomous operation. Manually or scheduled automatic backwash standard. Note: systems using this filter may require a larger feed pump to meet the 10gpm backwash requirement.
KIT-LB-BP-6SC	Shallow Well Jet Pump	Self priming up to 25ft (7.5M), composite construction, motor speed control to allow for maximum efficiency. Includes ACTech speed control and box. Note: max well depth 15ft (4.5M) if using as media backwash pump.
Feed Pumps		
KIT-LB400-FPS24	24VDC Feed Pump Assembly	With Procon 140 mag drive seawater vane pump, variable speed control, 1 hp Leeson DC motor.
KIT-LB-CP-FPS220	110 Or 220 VAC Feed Pump Assembly	With Procon 240 mag drive seawater vane pump, vfd speed control and 3/4 hp 220VAC three phase motor.
Post Treatment Options		
KIT-FLT-CALCTBB	PH Correcting Filter System	Automatically remineralizes and corrects the ph of RO permeate. Recommended for fresh or brackish water systems. 10" Big Blue calcite filter and housing.
EL-CHE-3GPD220A	Chlorine/chemical Injection System	Manual on/off controls. Tank level switch indicates low chemical level, composite construction for long life. Stroke and frequency adjustments for easy setup and operation.
FT-UVS-3GPM24	UV Post-treatment System	16Mj/cm2 standard dose rate 40mj/cm2 available, request a quote if required.
KIT-FWF-MN	Carbon Filter	For fresh water flush- circuit eliminates chlorine from flush water
Additional Accessories		
KIT-HHM	Hand held conductivity tester	W/calibration solution
EL-SLT-INCPMNT2	Inline salinity monitor	(Push to check)
KIT-LB-FWFM	Fresh water flush module	For systems without pressurized product water, specify voltage

List of all Portable Desalination and Purification Systems

AQUIFER SERIES

Article Number	Product	Product Information	Output
AF-200-DC	Aquifer 200	Highly portable water purification/desalination system. External power required.	30l/h, 8gph
AF-200-EX-FL	Aquifer 200 Expedition	External power required, compatible with optional Solar Power Pack (KIT-AF-FLRPS2P24).	30l/h, 8gph
AF-200-PPS	Aquifer 200 Power Pack Solar	Includes Solar Panel. A self-sufficient offgrid water purification/desalination solution that fits in a single case.	30l/h, 8gph
AF-FLR-200	Aquifer 200 Flight Ready	Complete portable watermaker system, 3 cases include watermaker, feed pumps and solar panels. Weight managed for commercial flights.	30l/h, 8gph
AF-360-EX-FL	Aquifer 360 Expedition	Portable with higher output. External power required, compatible with optional Solar Power Pack (KIT-AF-FLRPS3P24).	55l/h, 15gph
AF-FLR-360	Aquifer 360 Flight Ready	Complete portable watermaker system, 3 cases include watermaker, feed pumps and solar panels. Weight managed for commercial flights.	55l/h, 15gph
KIT-AF-FLRPS2P24	2 Panel Power Supply Case	Power supply case with options for 12/24v DC, 100-240c AC 50/60 Hz as well as included Solar Panels. Compatible with AF-200-EX-FL.	n/a
KIT-AF-FLRPS3P24	3 Panel Power Supply Case	Power supply case with options for 12/24v DC, 100-240c AC 50/60 Hz as well as included Solar Panels. Compatible with AF-360-EX-FL.	n/a

LANDBASED SERIES

Article Number	Product Information	Watts Used*	Output
LB-400	Compact, modular purification/desalination	300	64l/h, 17gph
LB-1800F-220M	Framed watermaker with manual controls	800	285l/h, 75gph
LB-1800C-220	Framed watermaker with automated Spectra Connect controller	800	285l/h, 75gph
LB-2800F-220M	Framed watermaker with manual controls	1200	435l/h, 115gph
LB-2800C-220	Framed watermaker with automated Spectra Connect controller	1200	435l/h, 115gph
LB-10000-F-MS	Framed watermaker with manual controls	3800	1,575l/h, 420gph
LB-10000F-230S	Framed watermaker with automated Spectra Connect controller	3800	1,575l/h, 420gph
LB-20000 Container	Containerized community-level watermaker built into a standard shipping container. Ready to combine with a solar power system.	< 8kW	3,155l/h 833gph
LB-4000F-220M	Brackish Water system, framed with manual controls	1200**	680l/h, 180gph
LB-4000C-220	Brackish Water system, framed with automated Spectra Connect controller	1200**	680l/h, 180gph
LB-14000F-M-BR2S	Brackish water system, framed with manual controls	5300**	2,208l/h 583gph
LB-14000F-230	Brackish water system, framed with automated Spectra Connect controller	5300**	2,208l/h 583gph

*Using Seawater feed at 32,000 ppm and 25°C (77° F).

**25,000 ppm maximum salinity for these brackish water systems

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Spectra reserves the right to make changes to this fact sheet.