

LB 400 - STATIONARY MODULAR WATER SOLUTION



PRODUCT SPECS

Production / Day	400 gal (1.5 m ³)
Production / Hour	17 gal (64 l)
Salt Rejection	99.5%
Recovery Rate	10%
Feed Flow Rate	Recommended Feed Flow rate is 10.5 lpm (2.8gpm) at 7.5 bar (100psi)
Feed Water Source	Fresh, brackish, seawater
Feed Pump	Not Included, See page 2
Power Requirement	24 V DC 48 V DC 110V AC 220V AC
Power	300-600 Wh (contingent on feed pump selection)
Watt per Liter	4
Temperature Range	Max 110°F (43°C) Min 36°F (2°C)
Shipping Weight	95 lbs (43.1 kg)
Shipping Dimensions	47" x 23" x 18" 120 cm x 59 cm x 46 cm

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 Watermakers' renowned customer service and support with technicians available by phone, e-mail, and WhatsApp in North America
- Also available in compact configuration with two 21" pressure vessels (LB-400S)

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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

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
Log Book

Special Note

This system does not include a feed pump.

A single LB-400 unit requires a feed flow of 10.5 lpm (2.8 gpm) at a pressure of 7.5 bar (100 psi). Two LB-400 units require a feed flow of 21 lpm (5.6gpm) at 7.5 bar (100 psi).

Optional feed pump kit KIT-LB-CP-FPS220 includes a Procon 240 vane pump & 220 V AC motor with a variable speed control. Feed pump kit is not self-priming and must have positive pressure relative to waterline or via a separate boost pump.

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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-10BBCALCITE	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
KIT-MD-AG14X65	14" x 65" Multi-Media Prefiltration System	Media filter is configured for seawater and optimized for easy backflushing. Specify voltage requirement at time of order. Media not included.
KIT-LB-CP-FPS220	220 V AC Feed Pump Kit	With Procon 240 mag drive seawater vane pump, VFD speed control and 220 V AC three phase motor.
KIT-FLT-CALCTBB	PH Correcting Filter System	A calcite cartridge is used to balance the PH and remineralize the product water in brackish water systems (not needed with seawater feed).
KIT-PMP-3GPDINJ	Chlorine or Chemical Injection System	This unit precisely meters concentrate into the feed or product water depending on desired application. Chlorine on product side is most common application.
KIT-FLT-CC	Carbon Filter Kit	For freshwater flush- eliminates chlorine from flush water. Also can be used on product water side to improve taste.
KIT-HHM	Hand held conductivity tester	Handheld salinity meter kit & calibration solution.
EL-SLT-INLPMNT2	Inline salinity monitor	Inline salinity monitor (push button to check salinity).

ALL PORTABLE & STATIONARY LANDBASED SYSTEMS

AQUIFER SERIES

Article Number	Product	Product Information	Output
AF-200-DC-12 AF-200-DC-24	Aquifer 200	Highly portable water purification/desalination system. In-case suction pump, external power required.	30 l/h, 8 gal/h
AF-360-DC-12 AF-360-DC-12	Aquifer 360	Highly portable water purification/desalination system with dual in-case suction pumps for higher output, external power required.	55 l/h, 15 gal/h
AF-200-EX-FL	Aquifer 200 EXP Flight Ready	Flight ready and enhanced priming capability using submersible pumps. External power required, compatible with optional Solar Power Pack (KIT-AF-FLRPS3P24)	30 l/h, 8 gal/h
AF-200-PPS	Aquifer 200 Power Pack Solar	Included Solar Panel, a self-sufficient offgrid water purification/desalination solution that fits in a single case.	30 l/h, 8 gal/h
AF-360-EX-FL	Aquifer 360 EXP Flight Ready	Flight ready and enhanced priming capability using submersible pumps, with higher output. External power required, compatible with optional Solar Power Pack (KIT-AF-FLRPS3P24).	55 l/h, 15 gal/h
AF-4000	Aquifer 4000	Revolutionary ultra-high output portable system, 3.5kW generator or external power required.	628 l/h, 166 gal/h
KIT-AF-FLRPS3P24	3 Panel Power Supply Case	Power supply case with options for 12/24 V DC, 100-240 V AC 50/60 Hz as well as included Solar Panels. Compatible with AF-200-EX-FL and AF-360-EX-FL.	n/a

LANDBASED SERIES

Article Number	Product Information	Watts Used*	Output
LB-400	Compact, modular purification/desalination	300	64 l/h, 17 gal/h
LB-1800M-220	Framed watermaker with manual controls	800	285 l/h, 75 gal/h
LB-1800C-220	Framed watermaker with automated Spectra Connect controller	800	285 l/h, 75 gal/h
LB-2800F-220M	Framed watermaker with manual controls	1200	435 l/h, 115 gal/h
LB-2800C-220	Framed watermaker with automated Spectra Connect controller	1200	435 l/h, 115 gal/h
LB-4000-220	Brackish water system, framed with manual controls	1200**	680 l/h, 180 gal/h
LB-4000C-220	Brackish water system, framed with automated Spectra Connect controller	1200**	680 l/h, 180 gal/h
LB-10000F-230S	Framed watermaker with automated Spectra Connect controller	3800	1,575 l/h, 420 gal/h
LB14000F-230	Brackish water system, framed with automated Spectra Connect controller	5300**	2,208 l/h, 583 gal/h

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

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

Katadyn Desalination, LLC.

Spectra Watermakers
2220 S. McDowell Blvd Ext
Petaluma, CA 94954 U.S.A.
Tel: +1 415 526 2780 | Fax: +1 415 526 2787
sales@spectrawatermakers.com | www.spectrawatermakers.com

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