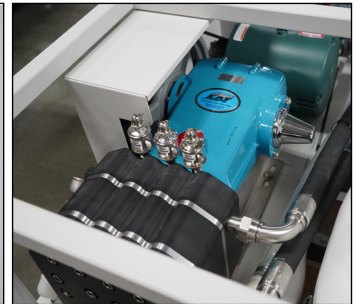


# LB-10000 F - ENERGY-EFFICIENT WATER PRODUCTION ON A LARGE SCALE



## PRODUCT SPECS

Production per Day	10,000 gal (37.5 m <sup>3</sup> )
Production per Hour	420 gal (1575 l)
Salt Rejection	99.5%
Recovery Rate	35%
Technology	High energy-efficient Reverse-Osmosis (RO)
Feed Water Source	Fresh, brackish, salt
Feed Flow Rate	Feed Flow is 75 lpm (20gpm) at 2 bar (30 psi) Note that the feed pressure needs to be adjustable to optimize pump performance for the pre-filtration system utilized.
Boost Pump	Not Included, See page 3
Voltage Options	208-240 V AC, single or three phase
Power	4 kWh
Watt per Liter	<2.5
Water Temperature Limits	Max 110°F (43°C)   Min 36°F (2°C)
Sound Pressure Level	79 dB at 1 meter
Weight	1600 lbs (725 kg)
Frame Dimensions	70" x 34.5" x 31" 178 cm x 88 cm x 79 cm

## FEATURES

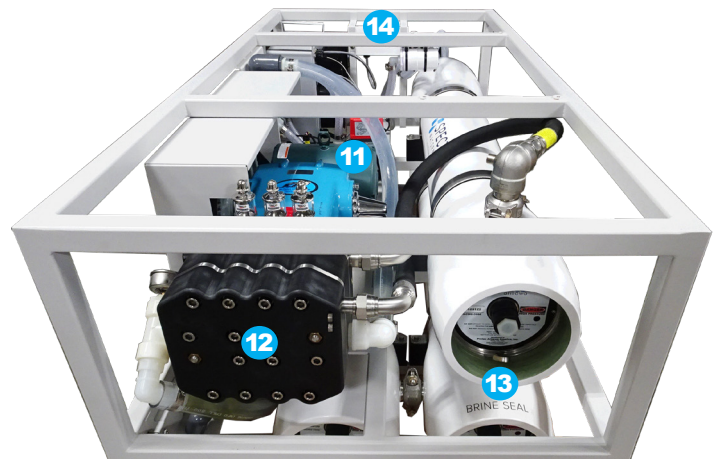
- Spectra Connect Controller for automated operation and LAN enabled remote monitoring and control
- Extremely energy efficient, requiring typically less than 4 kW for the complete system to purify water
- Soft-start speed control, no start-up spike
- Rugged, powder coated 304 stainless steel frame
- 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
- Significantly quieter than conventional RO watermakers
- Patented energy recovery design and automated controls eliminate the need for constant monitoring by an operator
- 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

## LB-10000 F - ENERGY-EFFICIENT WATER PRODUCTION ON A LARGE SCALE



1	Product Quality + Feed Flow Gauges
2	Product Water Out
3	Spectra Connect Control Panel
4	Boost Pressure Gauge
5	Membrane Pressure Gauge
6	Service Port
7	Brine Pressure Gauge
8	Brine Port
9	Water Inlet
10	Rugged 304 Stainless Steel Frame

11	5HP 220 V Motor
12	Pearson Pump Energy Recovery Device
13	4"x 40" Membranes
14	VFD Speed Control



### SYSTEM SHIPPING LIST

<b>System</b>
LB-10,000 in Powder Coated Stainless Steel Frame
<b>Components Built into Frame Assembly</b>
Pearson Pump Energy Recovery System
3 1000psi composite high pressure vessels w/ Filmtec 8 x 40" seawater RO membranes
Spectra Connect Control System
Powder Coated 304 Stainless Steel frame
<b>Installation Kit</b>
Service Hoses and Filter Wrench
User Manual

## LB-10000 F - ENERGY-EFFICIENT WATER PRODUCTION ON A LARGE SCALE

### SPARE PARTS AND CONSUMABLES

Article Number	Product
FT-FTC-5BB20	5 micron 4 x 20" cartridge filter
FT-FTC-10BBCALCITE	10" Big Blue Calcite filter - For optional remineralization of drinking water
KIT-SP20-35R2K5	2,500 hr SPP20-35 Pearson Pump rebuild kit
KIT-SP20-35R10K	10,000 hr SPP20-35 Pearson Pump rebuild kit
PP-20-BD-BT540H	SPP20 540H150 drive belt
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-LB-BP-20SC	Shallow Well Jet Boost Pump Kit	Includes 3-Phase 220 V, 50GPM Boost Pump & VFD Motor Speed Controller.
KIT-MD-AG16X65	Automated 16" x 65" Multi-Media Tank Kit	Media filter is configured for seawater and optimized for easy backflushing. Specify voltage requirement at time of order. Media not included.
KIT-FLT-CALCTBB	Remineralizer and PH-correction Calcite Filter Kit 4" x 10"	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-6GPDINJ	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-LB20CCBB	Carbon Filter Kit 20"	For removing chlorine from freshwater flush feed or used on the product water side to improve taste.
EL-SWT-SMLV	Tank Level Switch	Allows the Spectra Connect control to respond automatically to changes in storage tank levels.
PL-PRG-3/4FPVC	Pressure Regulator Kit	3/4" Pressure Regulator 5-125 PSI 35GPM. Used to regulate feed pressure on systems using an aftermarket boost pump without precise controls.

## 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-24	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
LB-14000F-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