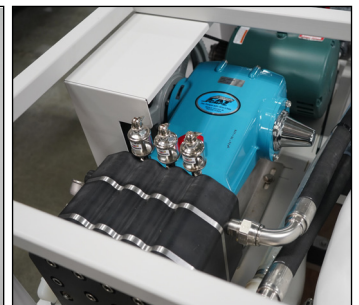


LB-10,000 F - Energy-efficient Water Production on a Large Scale



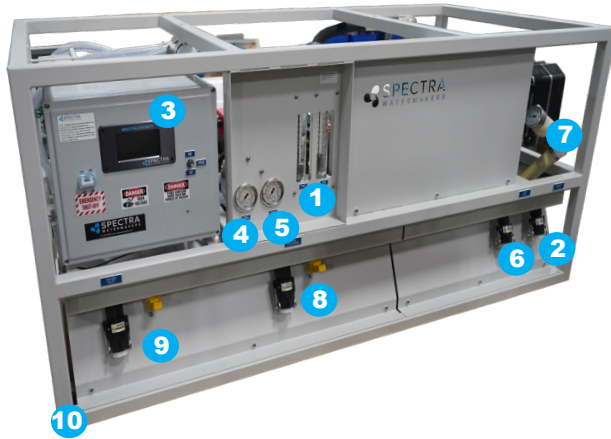
PRODUCT SPECS

Article Number	LB-10000F-230S
Salt Rejection	99.5%
Technology	High energy-efficient Reverse-Osmosis (RO)
Production per Day	37.5 m ³ /d (10,000 gpd)
Production per Hour	1575 lph (420 gph)
Recovery Rate	35%
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.
Voltage Options	208-240VAC, single or three phase
Power	4 kW
Watt per Liter	<2.5
Water Temperature Limits	Max 43°C (110°F) / Min 2°C (36°F)
Sound Pressure Level	79 dB at 1 meter
Weight	725 kg (1600 lbs)
Frame Dimensions	178 cm x 88 cm x 79 cm (70" x 34.5" x 31")

FEATURES

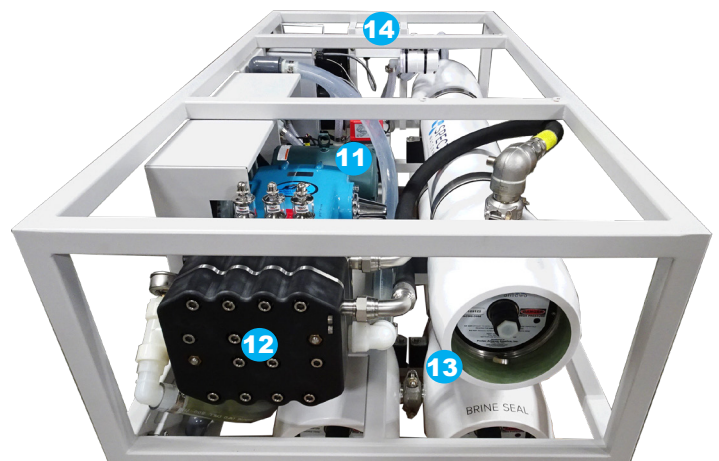
- Spectra Connect Controller for automated operation and LAN enabled remote monitoring and control
- Extremely energy efficient, requiring typically less than 4 kW for the complete system to purify water
- Soft-start speed control, no start-up spike
- Rugged, powder coated 304 stainless steel frame
- 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’s renowned customer service and support with technicians available by Skype, phone and e-mail in North America and Europe

LB-10,000 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 220V Motor
12	Pearson Pump Energy Recovery Device
13	4"x 40" Membranes
14	VFD Speed Control



SYSTEM SHIPPING LIST

System
LB-10,000 in Powder Coated Stainless Steel Frame
Components Built into Frame Assembly
Pearson Pump Energy Recovery System
3 1000psi composite high pressure vessels w/ Filmtec 8x40" seawater RO membranes
Spectra Connect Control System
Powder Coated 304 Stainless Steel frame
Installation Kit
Service Hoses and Filter Wrench
Hand-held TDS/Salinity Meter
User Manual
Log Book

LB-10,000 F - Energy-efficient Water Production on a Large Scale

SPARE PARTS AND CONSUMABLES

Article Number	Product
FT-FTC-5BB20	5 micron 4x20" cartridge filter
FT-FTC-10BBCALCITE	10" Big Blue Calcite filter - For optional remineralization of drinking water
KIT-SP5C-30R2K5	2,500 hr Pearson Pump rebuild kit
KIT-SP5C-30R10K	10,000 hr Pearson Pump rebuild kit
PP-20-BD-540H	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
EL-CHE-3GPD220A	Anti-scalant Chemical Injection System	On/off control integrated with main desalination system control for automatic operation. Tank level switch indicates low chemical level, composite construction for long life. Stroke and frequency adjustments for easy setup and operation.
FT-MD-AG16X65	Multi-media Prefiltration System	Electronically automated media valve heads allow for autonomous operation. Manually or scheduled automatic backwash standard, backwash on differential pressure available with differential pressure switch option, below. Two units are required per installation.
KIT-LB-BP-20SC	Shallow Well Jet Pump	Self priming up to 10ft (3m), composite construction, motor speed control to allow for maximum efficiency.
FT-MD-AG16X65	Automated Prefilter-System	This media filter is configured for seawater and optimized for easy backflushing
SUB-X-CB-MNRFA	Remineralizer and ph-correction	A calcite cartridge is used to balance the Ph and remineralize the product water in brackish water systems (not needed with seawater feed)
EL-CHE3GPM220A	Chlorine or Chemical Injection System	This unit precisely meters the 50 litre (15 g) concentrate into the product water
FT-UV-3GPM24	UV Post Treatment	Available when required by local regulations

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.