

FACT SHEET

LB-2,800 - Energy-efficient Water Production



PRODUCT SPECS

Article Number Salt Rejection Technology Production per Day Production per Hour Recovery Rate Feed Water Source Feed Flow Rate	 LB-2800C-220 99.5% High energy-efficient Reverse-Osmosis (RO) 10 m³/d (2800 gpd) 435 lph (115 gph) 30% Fresh, brackish, seawater Recommended Feed Flow rate is 24 lpm (6.5gpm) 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	1200W
Watt per Liter	<2.5
Water Temperature Limits	Max 43°C (110°F) / Min 2°C (36°F) •

١ ١. Sound Pressure Level Weight

-1/ 79 dB at 1 meter 216 kg (475 lbs)



FEATURES

- Spectra Connect Controller for automated operation and LAN enabled remote monitoring and control
- Extremely energy efficient, requiring typically less than 1200 watts to purify seawater
- Soft-start speed control, no start-up spike
- Rugged, powder coated 304 stainless steel frame
- Fixed freshwater 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 technicans available by Skype, phone and e-mail in North America and Europe

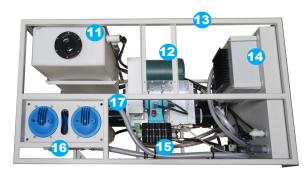




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1	Product Quality + Feed Flow Gauges	
2	Product Water Out	
3	Spectra Connect Control Panel	
4	Boost Pressure Gauge	
5	Membrane Pressure Gauge	
6	Brine Pressure Gauge	
7	Service Port	
8	Brine Port	
9	Service Valve	
10	4''x 40'' Membranes	



11	Flush/Service Module	
12	2HP 220V Motor	
13	Rugged 304 Stainless Steel Frame	
14	Spectra Connect Control System	
15	Pearson Pump Energy Recovery Device	
16	Prefilter Assembly	
17	4''x 40'' Membranes	

SYSTEM SHIPPING LIST

System		
LB-2800 in Powder Coated Stainless Steel Frame		
Components Built into Frame Assembly		
Pre-Filtration Assembly - Two 4x20" Filters		
Fresh Water Flush Tank		
Inlet and Brine Discharge Service Connections		
Spectra Connect Control Box with Main Circuit Breaker		
Feed Valve - Automatic On/Off		
24VDC Power Supply (for controls)		
Installation Kit		
Service Hoses and Filter Wrench		
Hand-held TDS/Salinity Meter		
User Manual		
Log Book		



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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	
PP5-BD-BLT270H	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-SP5AC	Shallow Well Jet Pump	This pump is self-priming up to 4.5m (15ft.) and is a robust solution for Seawater	
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	em 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	
EL-SWT-SMLV	Tank Level Switch	Allows the Spectra Connect control to respond automatically to changes in storage tank levels	



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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