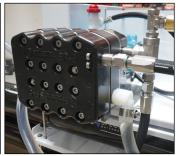


### LB-4000 F - Energy-efficient Solution for Brackish Water









#### **PRODUCT SPECS**

Article Number LB-4000C-220 Salt Rejection 99.5%

Technology High energy-efficient Reverse-Osmosis (RO)

Production per Day 15 m³/d (4,000 gpd) Production per Hour 630 lph (160 gph)

Recovery Rate 50% Feed Water Source Brackish

Voltage Options 208-240VAC single or three phase Power <1200 Watts on 24,000 PPM salinity

Watt per Liter 2

Water Temperature Limits  $Max 37^{\circ}C (110^{\circ}F) / Min 2^{\circ}C (36^{\circ}F)$ 

Sound Pressure Level 79 dB at 1 meter Weight 204 kg (450 lbs)

Frame Dimensions  $135 \text{cm} \times 102 \text{cm} \times 71 \text{cm}$ 

(53" × 40" × 28")

#### **FEATURES**

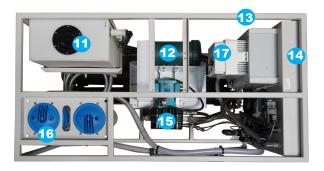
- Optimized for use with Brackish water (Total Dissoved Solids under 24,000 PPM)
- Spectra Connect Controller for automated operation and LAN enabled remote monitoring and control
- Extremely energy efficient, requiring typically less than 1200 watts to purify seawater
- Soft-start speed control, no 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



## LB-4000 F - Energy-efficient Solution for Brackish Water



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	VFD Speed Control	

#### SYSTEM SHIPPING LIST

System
LB-4000 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



# LB-4000 F - Energy-efficient Solution for Brackish Water

#### **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 for 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	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).	
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	AF-FLR-360 Aquifer 360 Complete portable watermaker system, 3 cases include watermaker, feed pumps and solar panels. Weight managed for commercial flights.		55l/h, 15gph
KIT-AF-FLRPS2P24	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

<sup>\*</sup>Using Seawater feed at 32,000 ppm and 25°C (77° F).

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<sup>\*\*25,000</sup> ppm maximum salinity for these brackish water systems