

LB-1800 M - ANALOG MODULAR WATERMAKER

PRODUCT SPECS

Production / Day	1800 gal (6810 l)
Production / Hour	75 gal (285 l)
Feed Voltages	208-240 V AC recommended DC units available on request
Watts	≈800w
Feed Water Parameters	Fresh, brackish or seawater
Weight	315 lbs (143 kg)
Pre Filters	4" x 20" spinning industrial 5 micron
Controls	Analog controls
Membranes	(2) 4" x 40" SWRO Membranes
Pump and Motor	Spectra Pearson pump
Salt Rejection	99.4%
Temperature Range	Max 110°F (37°C) Min 36°F (2°C)
Baseline Conditions	33,000 PPM feed water at 77°F (25°C)
pH Range	3-11 (typical seawater pH is 8)
Chlorine Tolerance	0 PPM
Warranty	Spectra standard warranty
Shipping Weight	370 lbs (168 kg)
Shipping Dimensions	54" x 30" x 37" (138 cm x 77 cm x 98 cm)



FACTS

The LB 1800 M is an analog desalination unit that is built using the patented Spectra Pearson Pump™ which allows for energy efficiencies comparable to large scale industrial desalination plants. The LB 1800 M is a compact modular system, making it easy to install.

The Pearson Pump™ is a breakthrough in pump design, combining a high-pressure piston pump with built-in energy recovery. The energy normally wasted in the high-pressure brine stream is recovered, saving up to 75% of the power required for a standard reverse osmosis system. The Pearson Pump's™ "hydraulically locked" recovery rate allows the pressure required for reverse osmosis to float, based on the salinity or temperature of the feed water, without control inputs. Standard systems require operator adjustments as the pressure changes, but the fixed recovery rate system eliminates the need for operator input and prevents membrane damage.

FEATURES

- Simple analog controls and gauges, minimal electronics.
- High pressure and vacuum switches for system protection.
- Super efficient requiring typically less than 800 watts to purify water, including feed pump, perfect for solar and wind power.
- Soft-start speed control means the system will never draw more than the rated power, no start-up spike. DC systems have the same soft start feature.
- Compact modules are easy to install and the single booster pump (not included) simplifies installation.
- Composite construction for superb corrosion resistance.
- Fixed system recovery for easy operation and long service life.
- Spectra Watermakers world renowned customer service and technical support, with real technicians available by phone, WhatsApp, and email.

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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-SP5-20R2K5	2,500 hr SPP5-20 Pearson Pump rebuild kit
KIT-SP5-20R10K	10,000 hr SPP5-20 Pearson Pump rebuild kit
PP5-BD-BLT300H	Drive belt
KIT-CHEM-SC2	Spectra alkaline membrane cleaner
KIT-CHEM-SC3	Spectra acid cleaner
KIT-CHEM-SC1	Spectra membrane preservative

INCLUDED

- Installation Kit
- Prefilter assembly
- Feed flow gauge
- Feed pressure and product flow gauge panel
- Storage chemical and service hoses
- Hand held salinity monitor
- Operation Manual

OPTIONAL COMPONENTS

Article Number	Product	Description
KIT-LB-BP-SP5AC	Shallow Well Jet Boost Pump Kit	Includes 3-Phase 220 V, 7-12GPM Boost Pump & VFD Motor Speed Controller
KIT-MD-AG14X65	Automated 14" 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-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-LB20CCBB	Carbon Filter Kit 20"	Generally 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.