

Technical Data Sheet



SB10000LH (High Wave)

Technology Description - Floating, solar powered, circulation equipment for lakes and reservoir applications. Day/night operation on solar only by utilizing a battery to store excess daytime power for nighttime operation.

Materials of Construction - T316 stainless steel constructions.
Foam-filled high-density polyethylene (HDPE) floats.
Thermoplastic rubber intake hose.

Flow Rates -

Flow rates at full speed at 10 feet (3.0 meter) diameter
Direct Flow Rate: 3,000 gpm (12,000 lpm)
Induced Flow Rate: 7,000 gpm (26,000 lpm)
Combined flow Rate: 10,000 gpm (38,000 lpm)

Drive System - High torque, direct drive (no gearbox), low voltage brushless D.C. motor.

Minimum Operating Depth - 46 inches (1.0m) with optional leg extensions. No damage to machine or bottom of reservoir when run dry in shallow water.

Flotation System - Three floats in triangular pattern each with an adjustable float arm for proper vertical positioning, total float buoyancy of 1,450 lbs (660kg).

Floats - Each float have independence to move freely about a central pivot point on the bottom side of the float which allows the forces due to waves be applied to the floats which does not transfer to other machine components.

Float Arms - 316 stainless steel heavy walled tubing provides a robust connection of the machine to the bottom pivot point of the high wave float.

Power Supply/Control System - *PV solar panels are protected from bird fouling with bird deterrent kit.*

PV Solar Panels: 3 x 90-watt photovoltaic solar panels orientated in triangular pattern. On-board battery storage for day/night operation.

Electronic Controller: Digital solid-state controller, mounted in weather-tight (NEMA 4X) enclosure with LOTO compliant ON/OFF switch. SCADA output through factory configurable RS232/RS485 serial communication (Modbus RTU) via 4Pin terminal block. Cellular connectivity to HiveLinx Remote Monitoring System, subscription not included.

Wiring: Corrosion-resistant industrial cord with molded watertight connectors that are indexed to prevent improper wiring.

Rotating Assembly - Removable assembly with easy access to motor. Impeller handles 4-inch (10cm) spherical solids. Oil-filled (food grade) teflon freeze sleeve with o-rings, shaft. Rotational indicator on shaft.

Fluid Intake Assembly - *Hose system bolted to bottom of structural assembly.*

Hose System : 10 to 100 feet (3 to 30.5 meters) available in 36 inch (91 cm) diameter X 10, 15, or 20 feet (3, 4.5, 6 meter) sections.

Intake Type : Horizontal high wave plate valve with 12-inch (31 cm) openings. Valve releases escaping water through bottom of hose during high wave events to minimize stress on machine

Intake Depth Adjustment: 15 feet (4.5 cm) of field adjustment with three SS chains connected to hose coupling.

Anchoring - Two mooring blocks tethered together with SS chain and attached to structural member on unit.

Ice Protection - Freeze sleeve and positive pumping under distribution dish to maintain circulation.

Accessories Available - (1) Beacon Light Kit (2) Radios

Shipping Size / Weight

- Crate** - 87in x 87in x 65in (2.2m x 2.2m x 1.7m) / 1500lbs (680kg) and 4 feet (1.2m) wide x 4 feet (1.2m) long x 4 feet (1.2m) high x 500 pound (225 kg) crate. *Exact weight and dimensions varies dependent on machine configuration.*

Maintenance / Warranty - Minimal maintenance. Limited 2-year parts and labor warranty.