## Technical Data Sheet



## SB10000PW

**Technology Description-** Floating, solar powered, circulation equipment for potable water reservoirs. Day/night operation on solar only by utilizing a battery to store excess daytime power for nighttime operation.

Materials of Construction - NSF/ANSI Standard 61- T316 stainless steel construction. Foam-filled high-density polyethylene (HDPE) floats. Thermoplastic rubber intake hose. HDPE strainer.

The SB10000PW is NSF / ANSI

Standard 61 Certified, includes NSF/ANSI 61, Annex G.

## Minimum Access Opening / Machine Size / Weight -

Machine can be assembled through 3 feet by 3 feet (92 cm by 92 cm) clear opening. Assembled machine is 16 feet (5 m) in diameter and weighs 850 pounds (380 kg).

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

Minimum Operating Depth - At depths below 5 feet (1.5 m), the impeller will be out of the water and the machine will stop circulating water. No damage to machine when run dry in shallow water.

**Minimum Head Space** - 26 inch (0.7 meter) headspace is required.

Flotation System - Three floats in triangular pattern each with an adjustable float arm for proper vertical positioning, total float buoyancy of 1,400 lbs (660 kg).



Figure 1: SB10000PW

Rotating Assembly - Removable assembly with easy access to impeller and impeller shaft.

Power Supply/Control System - Photovoltaic (PV) Solar Panels, Battery and Electronic Controller are mounted on rack outside. PV Solar Panels: 3 X 80-watt photovoltaic solar panels. Battery storage for day/night operation.

Electronic Controller: Digital solid-state controller, mounted in weather-tight (NEMA 4X) enclosure with internally fused disconnect. SCADA output through RS-232 serial communication (Modbus RTU), DB9 male connection point inside enclosure. Wireless options available, not included.

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

Fluid Intake Assembly - Intake hose bolted to bottom of structural assembly.

Intake Hose: 10 to 40 feet (3 to 30 m) available in 36-inch (92 cm) diameter X 10, 15 or 20 foot (3, 4.5, or 6 m) sections. Intake Assembly at Bottom of Hose: 48-inch (1.2 m) diameter plate rests just above floor of reservoir. Horizontal flow into the intake hose is through 12-inch (32 cm) openings above the plate.

Intake Depth Adjustment: 15 feet (4.5 m) of field adjustment with three SS chains connected to hose coupling. Self-adjusting for all depths up to 40 feet (12.2 m).

Chlorine Boosting - Chlorine boost hose, accessible at top of reservoir spans down and connects to intake for fast chlorine dispersion during in-reservoir boosting.

Accessories Available - (1) Portable Chlorine Boost System, (2) LED RPM Indicator, (3) Supplemental Power Kit, and (4) Wireless SCADA Kit.

## Shipping Size / Weight -

 Crate - 87 inch W X 87 inch L X 65 inch H (2.2 m x 2.2 m x 1.7 m) / 1,500 pounds (680 kg) Exact weight and dimensions varies dependent on machine configuration.

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

Subject to change without notice.