

SB500PWc

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 - T316 stainless steel constructions.

Foam-filled high-density polyethylene (HDPE) floats.

Thermoplastic rubber intake hose. HDPE Strainer.

The SB500PWc is NSF/ANSI Standard 61 Listed, includes NSF/ANSI 61, Annex G.



Minimum Access Opening / Machine Size / Weight - Machine can be installed through 18 inch (46 cm) diameter opening. Assembled machine is 8 feet (2.5 meter) in diameter and weighs 85 pounds (40 kg). 16 inch (0.4 meter) headspace is required.

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

Minimum Operating Depth - At depths below 2 feet (0.6 meters), the impeller will be out of the water and the machine will stop circulating water. No damage to machine if ran 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 300 pounds (140 kg).

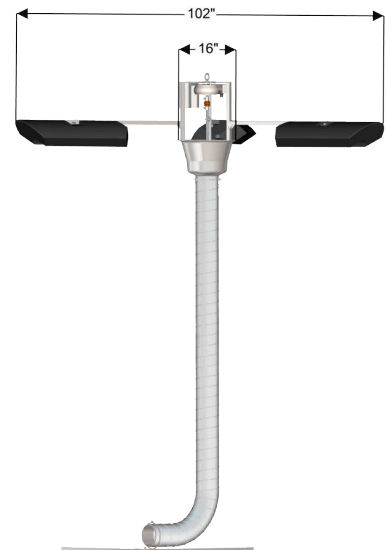


Figure 1: SB500PWc

Power Supply/Control System - Photovoltaic (PV) Solar Panel, Battery and Electronic Controller are mounted on rack outside.

PV Solar Panels: 80-watt photovoltaic solar panel. 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. Low voltage in reservoir, less than 36 VDC.

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

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

Intake Hose : 20 to 100+ feet (6 to 30+ m) available in 6-inch (15.2 cm) diameter X 20 feet (6 m) sections.

Torque Bar, Chemical Injection: Torque bar placed at bottom end of hose, positions open end of hose at bottom floor of reservoir.

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 Disinfectant Boost System, (2) LED RPM Indicator (3) Supplemental Power Kit, and (4) Wireless SCADA Kit.

Shipping Size / Weight

- **Crate** - 4 feet W X 6 feet L X 5 feet H (1.2 m x 1.8 m x 1.5 m) / 500 pounds (225 kg) *Exact weight and dimensions varies dependent on machine configuration.*

Life / Maintenance / Warranty - Expect 25-year life, minimal maintenance. Limited 2-year parts and labor warranty. Limited 25-year photovoltaic module manufacturer performance warranty and 10-year motor warranty.