

Technical Data Sheet

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 (457 mm) diameter opening. Assembled machine is 8 feet (2.5 meter) in diameter and weighs 85 pounds (40 kg).

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.

Minimum Head Space - 18 inch (457 millimeters) headspace is required.

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).

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 (152 mm) 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.*

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



Figure 1: SB500PWc