## SB5000PW

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 SB5000PW 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


Figure 1: SB5000PW $1,400 \mathrm{lbs}(660 \mathrm{~kg}$ ).
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: $3 \times 80$-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 : 20 to 60 feet ( 6 to 18 m ) available in 16 -inch ( 40 cm ) diameter X 20 feet ( 6 m ) sections.
Intake Assembly at Bottom of Hose: Rectangular intake with openings around perimeter.
Intake Depth Adjustment: No depth adjustment is necessary for fluctuations in water level. Intake draws water in a horizontal layer within 1 inch $(2.5 \mathrm{~cm})$ of the tank or reservoir floor.

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 ( $2.2 \mathrm{~m} \times 2.2 \mathrm{~m} \times 1.7 \mathrm{~m}$ ) / 1,500 pounds ( 680 kg ) Exact weight and dimensions varies dependent on machine configuration.

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[^0]:    Maintenance / Warranty - Minimal maintenance. Limited 2-year parts and labor warranty.

