

Technology Description:	Floating, solar powered, circulation equipment for potable water tanks and reservoirs. Day/night operation on solar only by utilizing a battery to store excess daytime power for nighttime operation.
Minimum Access Opening/ Machine Size/Weight:	Machine can be installed through a 3 feet by 3 feet (92cm by 92 cm) opening. Assembled machine is 16 feet (5 m) in diameter and weighs 800 pounds (360 kg).
Materials of Construction NSF/ANSI Standard 61:	316 stainless steel construction. Foam-filled high-density polyethylene (HDPE) floats. Thermoplastic rubber intake hose. HDPE strainer. The SB1000PW Core Unit is NSF/ANSI Standard 61 Certified.
Drive System:	High torque, direct drive (no gearbox), low voltage brushless D.C. motor.
Power Supply/Control System:	<i>PV Solar Panels, Battery and Electronic Controller are mounted on rack outside.</i>
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. Low voltage in reservoir, less than 36 VDC.
Rotating Assembly:	Removable assembly with easy access to impeller and impeller shaft.
Flotation System:	Three floats in triangular pattern with total buoyancy of 1,450 pounds (660 kg).
Fluid Intake Assembly:	<i>Intake hose bolted to bottom of machine structural assembly.</i>
Hose System	10 to 40 feet (3 to 30 m) available in 36-inch diameter (92cm) X 10, 15, or 20 feet (3m, 4.5m, or 6m) sections.
Intake Type	Horizontal plate with 12-inch (32cm) openings.
Intake Depth Adjustment	15 feet (4.5m) of field adjustment with three SS chains connected to hose coupling.
Intake Assembly at Bottom of Hose	48-inch (1.2m) diameter plate rests just above floor of reservoir. Horizontal flow into the intake hose is through 12-inch (32cm) openings above the plate.
Intake Depth Adjustment	<i>Self-adjusting for all depths up to 40 feet (12.2m).</i>
Chlorine Boosting	Chlorine boost hose, accessible at top of reservoir spans down and connects to intake for fast chlorine dispersion during in-reservoir boosting.
Minimum Water Depth:	At depths below 5 feet (1.5m), 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.
Accessories Available:	1) Portable Chlorine Boost System, (2) LED RPM Indicator (3) Supplemental Power Kit, and (4) Wireless SCADA Kit
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.