

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.
Minimum Access Opening / Machine Size/Weight:	Machine can be installed through 18 inch (46 cm) diameter opening. Assembled machine is 10 feet (3.0 meter) in diameter and weighs 250 pounds (115 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 SB500PWc is NSF/ANSI Standard 61 Listed, includes NSF/ANSI 61, Annex G.
Drive System:	High torque, direct drive (no gearbox), low voltage brushless D.C. motor.
Power Supply/Control System:	Photovoltaic (PV) Solar Panel, Battery and Electronic Controller are mounted on rack outside.
PV Solar Panels	80-watt PV 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.
Flotation System:	Three floats in triangular pattern with total float buoyancy of 300 pounds (140 kg).
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.
Minimum Water 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.
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.