


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 assembled through 26 inch by 26 inch (66cm by 66cm) opening. Assembled machine is 10 feet (3.0 m) in diameter and weighs 400 pounds (180 kg).
Materials of Construction NSF/ANSI Standard 61: 	316 stainless steel construction. Foam-filled high-density polyethylene (HDPE) floats. Thermoplastic rubber intake hose. Medium-density polyethylene (MDPE) & 316 stainless steel intake. <b>SB1250PW is NSF/ANSI Standard 61 Certified, includes NSF/ANSI 61, Annex G.</b>
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 DC 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 600 pounds (270kg).
Fluid Intake Assembly:	Intake hose bolted to bottom of structural assembly.
Intake Hose	20 to 100 feet (6 to 18 m) available in 8-inch (20 cm) diameter X 20 feet (6 m) sections.
Intake Assembly at Bottom of Hose	Rectangular intake with openings around perimeter.
Chlorine Boosting	Chlorine boost hose, accessible at top of reservoir spans down and connects to intake for fast chlorine dispersion during in-reservoir boosting.
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 cm) of the tank or reservoir floor.
Minimum Water Depth:	At depths below 2 feet (0.6m), 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.