

SB5000v12PW SPECIFICATIONS

Technology Description:	Floating, solar powered, circulator for wastewater treatment and freshwater applications. Day/night operation on solar only by utilizing a battery to store excess daytime power for nighttime operation.
Flow Rates:	<i>Flow rates at full speed (60 rpm) at 10 feet diameter</i>
Direct Flow Rate - Day	700 gallons per minute, 35.0 gpm/watt.
Induced Flow Rate - Day	4,300 gallons per minute.
Combined Flow Rate - Day	5,000 gallons per minute.
Combined Flow Rate - Night	5,000 gallons per minute with adequate battery power.
Minimum Access Opening/ Machine Size/Weight:	Machine can be assembled through 3 feet by 3 feet opening. Assembled machine is 16 feet in diameter and weighs 600 pounds.
Materials of Construction:	316 stainless steel construction. Foam-filled high-density polyethylene (HDPE) floats. Thermoplastic rubber intake hose. HDPE strainer.
Drive System:	High torque, direct drive (no gearbox), axial airgap Lorentz force brushless D.C. motor.
Power Supply/Control System:	Photovoltaic (PV) solar panels, Battery and Electronic Controller are mounted on rack outside.
PV Solar Panels	3 X 80-watt photovoltaic solar panels. Battery storage for day/night operation.
Electronic Controller	Solid-state controller, mounted in weather-tight (NEMA 4X) enclosure with externally fused disconnect. SCADA output options.
Wiring	Corrosion-resistant industrial cord with molded watertight connectors that are indexed to prevent improper wiring.
Rotating Assembly:	Removable assembly with easy access to impeller and impeller shaft.
Flotation System:	Three floats in triangular pattern each with an adjustable float arm for proper vertical positioning, total float buoyancy of 1,200 pounds.
Fluid Intake Assembly:	Intake hose bolted to bottom of structural assembly.
Intake Hose	20 to 60 feet available in 12-inch diameter X 20 feet sections.
Intake Assembly at Bottom of Hose	Inverted bell shape strainer with 4-inch holes.
Intake Depth Adjustment	No depth adjustment is necessary for fluctuations in water level. Weight and flotation of the 'J' bend of the hose keeps intake above bottom of reservoir at all operating depths. Strainer can be chained up higher if desired.
Minimum Operating Depth:	At depths below 5 feet, the impeller will be out of the water and the machine will stop circulating water. No damage to machine run dry in shallow water.
Accessories Available:	(1) Supplemental Shore Power Kit, (2) Outputs to SCADA and (3) Chemical Injection Kit.
Life/Maintenance/Warranty:	25-year life. Minimal maintenance. Limited 2-year parts and labor warranty

Subject to change without notice.