

## SOLARPLEX SPX-800-5

The SolarPlex SPX-800-5 is a solar powered horizontal multistage centrifugal water pump which can operate with solar PV panel configurations rated anywhere from 100W-800W, straight from the box. This allows head and flow to increase simply by adding more PV panels. Advanced MPPT software and electronics, combined with low-light operability means more water per day at a lower cost.

### SOLUTION OVERVIEW

Flow Rate	max. 23.8 GPM
Head	max. 246 ft
Power Range	100W to 800W / 1/8hp to 1hp

### DIMENSIONS AND WEIGHTS

Length	15.0in
Height	9.8in
Width	5.5in
Weight	24lbs
Thread size	1"
Hose size	1 1/4"



Box dimensions	16.9 x 7.9 x 10.2 in
Total shipping weight	26.5 lbs

### BENEFITS

- More water per day at a range of heads
- Reliable design
- 2 year warranty
- No fuel required
- Easily user maintained

### KEY FEATURES

Direct PV connection and pump operation from integrated controller (no separate controller)

Integrated high efficiency MPPT (incremental conductance Maximum Power Point Tracking)

Automatic protection from overload, overtemperature, reverse polarity & locked rotor (i.e. impedance protected)

Continuous duty pump with a fan-cooled motor and temperature sensor integrated into motor windings

Maintenance-free brushless DC (BLDC) motor, pump-end all stainless steel 304, NSK bearings, and unlimited lifetime metal-film capacitors for voltage regulation

Power limiter control mode allows users to set maximum flow rate to prevent dry running

Switch control inputs for dry run protection and tank overflow

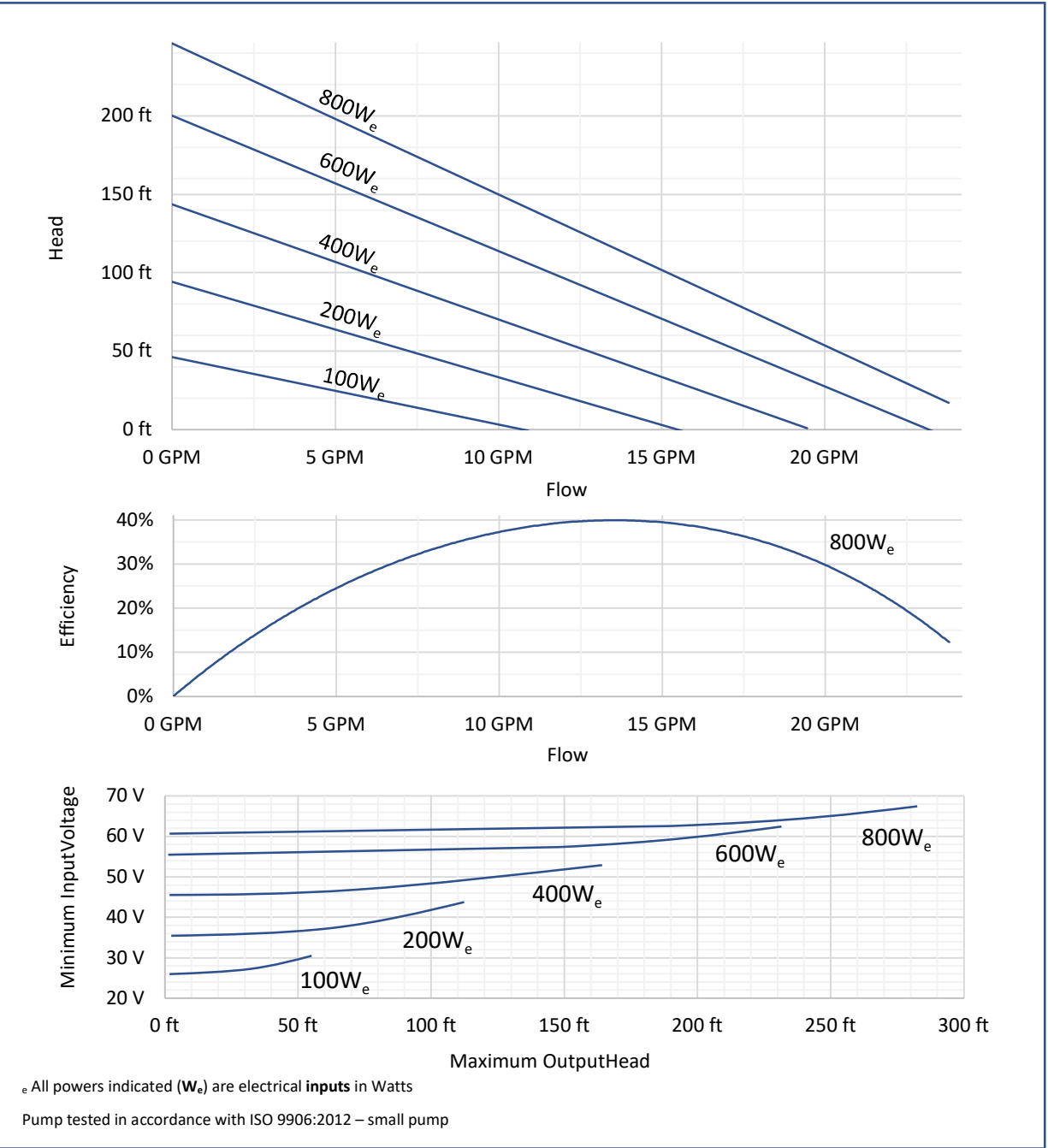


TECHNICAL DATA

Efficiency	max. 40%	Insulation Class	F
Max Input Voltage (Voc)	105 VDC	Water Temperature	32°F - 122°F
Min Input Voltage (Vmp)	See chart below	Ambient Temperature	max. 122°F
Motor Current	max. 14 A	Premium Materials	Stainless steel AISI 304
Enclosure Class	IP56	Impeller Stages	5

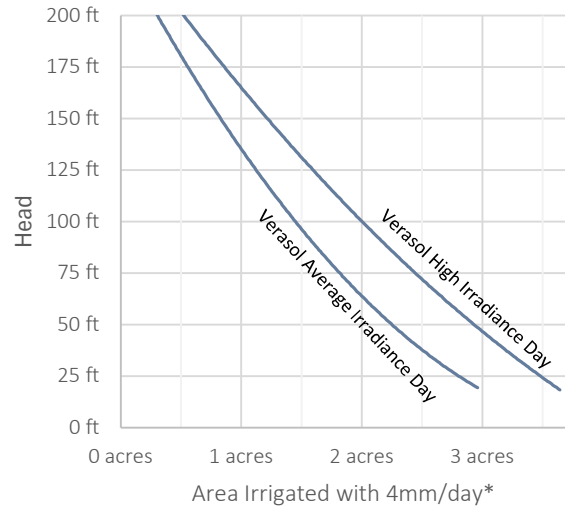
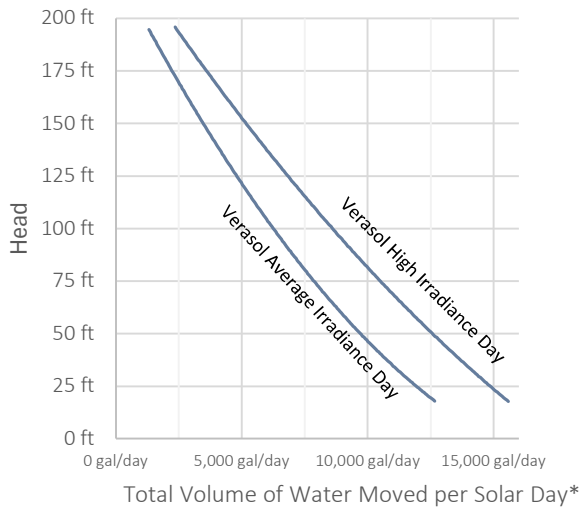
N.B. 2 PV panels connected in series are generally required for heads over 66 ft and/or power levels over 200W.

PERFORMANCE CHARTS

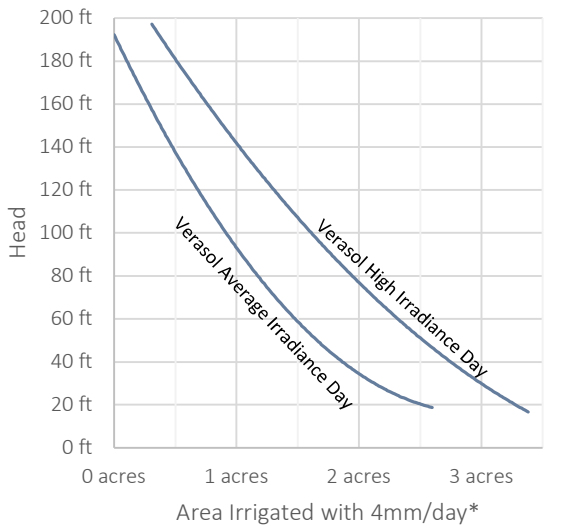
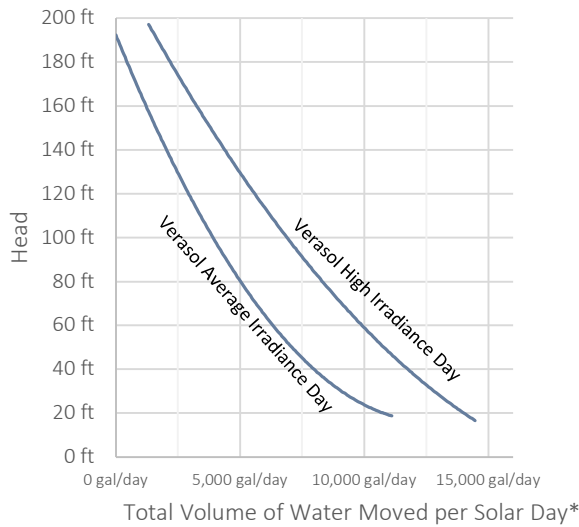


## DAILY OUTPUT CHARTS

### 1,400Wp ARRAY OF 2x 700Wp PV PANELS



### 1,100Wp ARRAY OF 2x 550Wp PV PANELS



\*Daily output plotted according to section 3.8.b. of the VeraSol Global LEAP Solar Water Pump Test Method Version 2, 5<sup>th</sup> April 2021, [Global-LEAP-Solar-Water-Pump-Test-Method-v.2-Apr2021.pdf](#)