

# PS Solar Pump Systems

## Submersible Pump Systems for 4" and 6" Wells

### Application

- drinking water supply
- livestock watering
- pond management
- irrigation
- etc.

### Characteristics

- fast, failure-free installation
- excellent serviceability
- high reliability and life expectancy
- short Return of Investment (ROI) cycle
- lower Total Cost of Ownership (TCO)



Picture may differ from actual product

### Helical Rotor (HR) Types

pump system		PS200 HR	PS600 HR	PS1200 HR	PS1800 HR	PS4000 HR
max. total dynamic head (TDH)	[m   ft]	50   170	180   590	240   790	250   820	350   1,150
max. flow rate	[m <sup>3</sup> /h   1,000 US gal./h]	2.7   0.7	2.7   0.7	2.7   0.7	4.0   1.1	2.4   0.6
solar operation: max. power voltage (Vmp)*	[VDC]	> 34	> 68	> 102	> 102	> 238
open circuit voltage (Voc)	[VDC]	max. 100	max. 150	max. 200	max. 200	max. 375
nominal voltage	[VDC]	24–48	48–72	72–96	72–96	168–192
battery operation: nominal voltage	[VDC]	24–48	48	72–96	72–96	n.a.

### Centrifugal (C) Types

pump system		PS150 C	PS600 C	PS1200 C	PS1800 C	PS4000 C
max. total dynamic head (TDH)	[m   ft]	20   65	25   80	40   130	100   330	170   560
max. flow rate	[m <sup>3</sup> /h   1,000 US gal./h]	5.0   1.3	11   2.9	20   5.3	51   13.5	70   18.5
solar operation: max. power voltage (Vmp)*	[VDC]	> 17	> 68	> 102	> 102	> 238
open circuit voltage (Voc)	[VDC]	max. 50	max. 150	max. 200	max. 200	max. 375
nominal voltage	[VDC]	12–24	48–72	72–96	72–96	168–192
battery operation: nominal voltage	[VDC]	12–24	48	72–96	72–96	n.a.

\*) PV modules at standard test condition: AM = 1.5, E = 1,000W/m<sup>2</sup>, cell temperature: 25 °C

#### Controller: PS

- controlling and monitoring
- control inputs for well probe, dry running protection, remote control etc.
- protected against reverse polarity, overload and high temperature
- solar operation: integrated MPPT (Maximum Power Point Tracking)
- battery operation: low voltage disconnect

#### Motor: ECDRIVE HR/C

- maintenance-free brushless DC motor
- water-filled
- no electronics in the motor
- submersion max. 250m water column, IP68
- premium materials

#### Pump End: PEHR/C

- high life expectancy
- non-return valve
- premium materials
- optional: dry running protection

# PS Solar Pump Systems

## Surface Pump Systems

### Application

- drinking water supply
- livestock watering
- pond management
- water circulation through swimming-pool filter systems or thermal collectors
- pressurising home water systems
- irrigation
- etc.

### Characteristics

- fast, failure-free installation
- excellent serviceability
- high reliability and life expectancy
- short Return of Investment (ROI) cycle
- lower Total Cost of Ownership (TCO)



PS150 Boost



PS600 CS-15-1\*



PS1800 CS-36-1

Picture may differ from actual product

pump system		PS150 Boost	PS600 CS-15-1*	PS1800 CS-36-1
max. total dynamic head (TDH)	[m   ft]	120   400	14   45	16   55
max. flow rate	[m³/h   1,000 US gal./h]	1.3   0.35	15   4.0	36   9.5
solar operation:	max. power voltage (Vmp)**	[VDC] > 17	> 68	> 102
	open circuit voltage (Voc)	[VDC] max. 50	max. 150	max. 200
	nominal voltage	[VDC] 12–24	48–72	84–96
battery operation:	nominal voltage [VDC]	12–24	48	96
pump type		positive displacement	centrifugal pump	centrifugal pump
integrated strainer		-	■	■
suitable for sea water		-	on request	on request

\*\* ) PV modules at standard test condition: AM = 1.5, E = 1,000W/m², cell temperature: 25 °C

### Controller: PS

- controlling and monitoring
- control inputs for well probe, dry running protection, remote control etc.
- protected against reverse polarity, overload and high temperature
- solar operation: integrated MPPT (Maximum Power Point Tracking)
- battery operation: low voltage disconnect

### Motor: ECDRIVE Boost/CS

- maintenance-free brushless DC motor
- no electronics in the motor
- premium materials

### Pump End: PE Boost/CS

- high life expectancy
- premium materials
- optional: dry running protection

\*) PS600 CS-15-1 was formerly sold under the name PS600 BADU Top12. The product is identical.