

# 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)





### 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		[m³/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	[V DC]	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		[m³/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 volta	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.

<sup>\*)</sup> 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 HR/C

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

#### Pump End: PE HR/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

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 = 1,000 W/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

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