

# 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 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/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. 250 m water column, IP68
- premium materials

### Pump End: PE HR/C

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