

# **PS Centrifugal Solar Pump Systems**

Submersible Pump Systems for 4" and 6" Wells



LORENTZ PS centrifugal pumps are high quality products designed for higher flow drinking water supply, livestock watering, pond management and irrigation applications. PS centrifugal pumps provide large volumes of water economically, without pollution, anywhere. The LORENTZ PS range of DC powered centrifugal pumps have been designed specifically to pump larger volumes of water efficiently using solar power. These highly efficient pumps can achieve flow rates of 79 m<sup>3</sup>/hour. Each system consists of a pump, pump motor and a controller. This modular concept keeps all electronics above ground providing simple servicing, ease of access and a low cost of ownership.

## **Benefits**

- Long life expectancy and proven in service record
- Designed for use in remote and harsh conditions
- Smart modular design for simple and cost effective servicing and repair
- Water filled motors for reliability and to avoid oil contamination
- Fast and simple installation
- Cost effective spare parts philosophy
- Very strong ROI against diesel powered pumping reducing production costs and reducing carbon footprint
- Large range of pumps to closely match each application and optimise efficiency

- Features
- Engineered in Germany
- High quality non corrodible materials used throughout
- Cast stainless steel components
- Solar direct connect with AC connection options
- MPPT technology to maximise power use from PV modules
- ECDRIVE DC brushless motors, designed for solar, with over 90% efficiency
- Optional data logger

| pump system                   |        | PS150 C | PS600 C | PS1800 C | PS4000 C |
|-------------------------------|--------|---------|---------|----------|----------|
| max. total dynamic head (TDH) | [m]    | 20      | 30      | 100      | 160      |
| max. flow rate                | [m³/h] | 4.0     | 12      | 53       | 79       |
| solar operation:              |        |         |         |          |          |
| max. power voltage (Vmp)*     | [VDC]  | > 17    | >68     | > 102    | >238     |
| open circuit voltage (Voc)    | [VDC]  | max. 50 | max.150 | max. 200 | max. 375 |
| nominal voltage               | [VDC]  | 12-24   | 48-72   | 72-96    | 168–192  |
| battery operation:            |        |         |         |          |          |
| nominal voltage               | [VDC]  | 12 & 24 | 48      | 96       | n.a.     |
|                               |        |         |         |          |          |

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

### To find out more visit www.lorentz.de BERNT LORENTZ GmbH & Co. KG

Siebenstuecken 24, 24558 Henstedt-Ulzburg, Germany, Tel. +49 (0) 4193 8806 - 700

All specifications and information are given with good intent, errors are possible and products may be subject to change without notice. Pictures may differ from actual products depending on local market requirements and regulations. A pump system consists of a controller, motor and pump end. Multiple pumps/ pump ends are shown to represent the wide range of pumps (over 70) that LORENTZ has.



## Sun. Water. Life.