

# PS1800 HR-23

## Solar Submersible Pump System for 4" wells

### System Overview

Head	max. 80 m
Flow rate	max. 3.9 m³/h

PS DataModule – Integrated Data Logger and advanced pump management features. Allows for simple system configuration, real-time and stored data plus provides Bluetooth communication to PumpScanner Android™ App and PS Communicator.\*

### Technical Data

#### Controller PS1800

- Control inputs for dry running protection, remote control etc.
- Protected against reverse polarity, overload and overtemperature
- Integrated MPPT (Maximum Power Point Tracking)
- Battery operation: Integrated low voltage disconnect

Power	max. 1.8 kW
Input voltage	max. 200 V
Optimum Vmp**	> 102 V
Nominal voltage (battery operation)	96 V
Motor current	max. 14 A
Efficiency	max. 98 %
Ambient temp.	-30...50 °C
Enclosure class	IP65

#### Motor ECDRIVE 1200-HR / ECDRIVE 1800-HR

- Maintenance-free brushless DC motor
- Water filled
- Premium materials, stainless steel: AISI 304/316
- No electronics in the motor

Rated power	1.7 kW
Efficiency	max. 92 %
Motor speed	900...3,300 rpm
Insulation class	F
Enclosure class	IP68
Submersion	max. 150 m

#### Pump End PE HR-23\*\*\*

- Non-return valve
- Premium materials, stainless steel: AISI 304/316
- Optional: dry running protection
- Helical rotor pump

#### Pump Unit PU1800 HR-23 (Motor, Pump End)

Borehole diameter	min. 4,0 in
Water temperature	max. 50 °C



### Standards



2006/42/EC, 2004/108/EC, 2006/95/EC



Type Approved  
Safety  
Regular Production  
Surveillance  
IEC/EN 61010-1:2010, IEC 62103:2003, IEC/EN 60034-1:2010,  
IEC/EN 60335-2-41:2003+A1+A2,  
IEC/EN 60335-1:2012, EN 62233:2008  
IEC/EN 61000-6-4:2007+A1, IEC/EN 61000-6-2:2005

IEC/EN 61702:1995, IEC/EN 62253 Ed.1

The logos shown reflect the approvals that have been granted for this product family. Products are ordered and supplied with the approvals specific to the market requirements.

\* PS DataModule is included in all PSk2 controllers and any PS controllers with –D in their description. –D variants should be ordered if there is a potential need to use the PS DataModule features in the future as this is not a retrofit option.

\*\*Vmp: MPP-voltage under Standard Test Conditions (STC): 1000 W/m² solar irradiance, 25 °C cell temperature

\*\*\*Specify temperature range on order

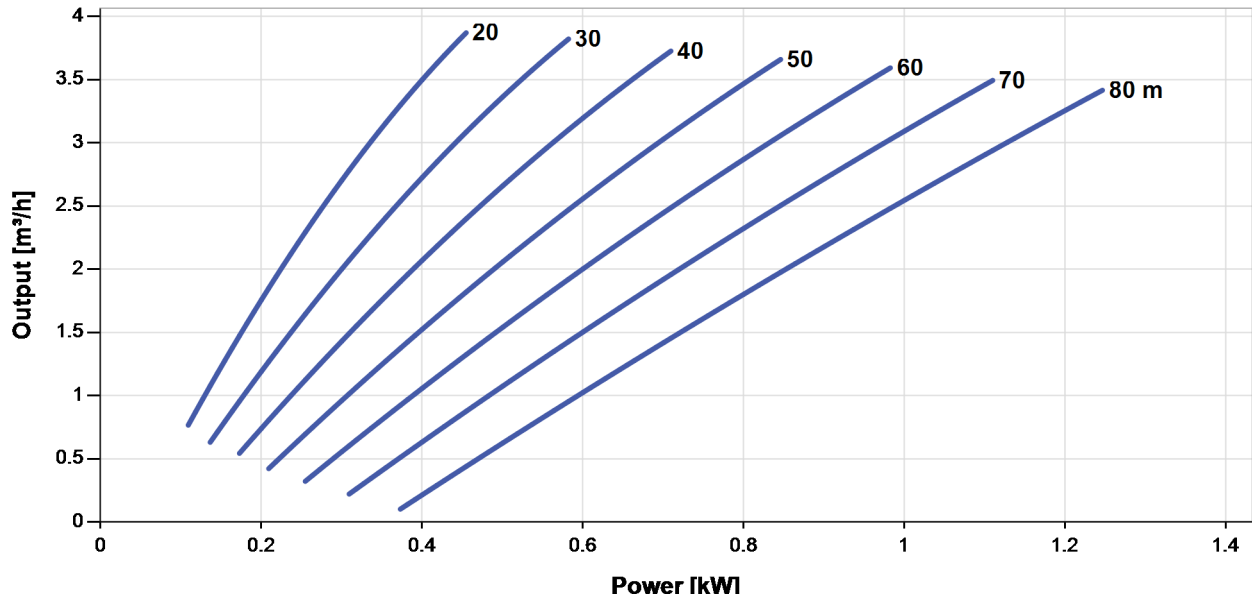


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### Pump Chart

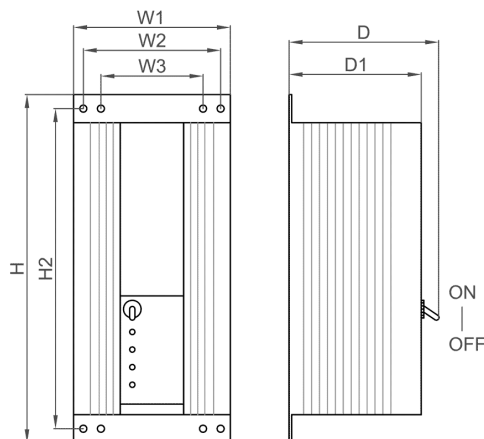
$V_{mp}^* > 102 \text{ V}$



### Dimensions and Weights

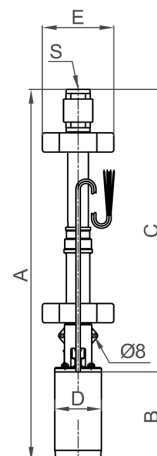
#### Controller

H = 396 mm  
 H2 = 364 mm  
 W1 = 178 mm  
 W2 = 156 mm  
 W3 = 116 mm  
 D = 165 mm  
 D1 = 150 mm



#### Pump Unit\*\*

A = 871 mm  
 B = 185 mm  
 C = 686 mm  
 D = 96 mm  
 E = 147 mm  
 S = 1.25 in



	Net weight
Controller	4.5 kg
Pump Unit	12 kg
Motor	7.0 kg
Pump End	4.5 kg

\* $V_{mp}$ : MPP-voltage under Standard Test Conditions (STC): 1000 W/m² solar irradiance, 25 °C cell temperature

\*\*By cutting the rubber spacers the diameter can be adjusted between 6" and 4" wells.

