

PS1800 HR-10

Solar Submersible Pump System for 4" wells

System Overview

Head	max. 80 m
Flow rate	max. 2.1 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-10***

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

Pump Unit PU1800 HR-10 (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
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ID 2000000000

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

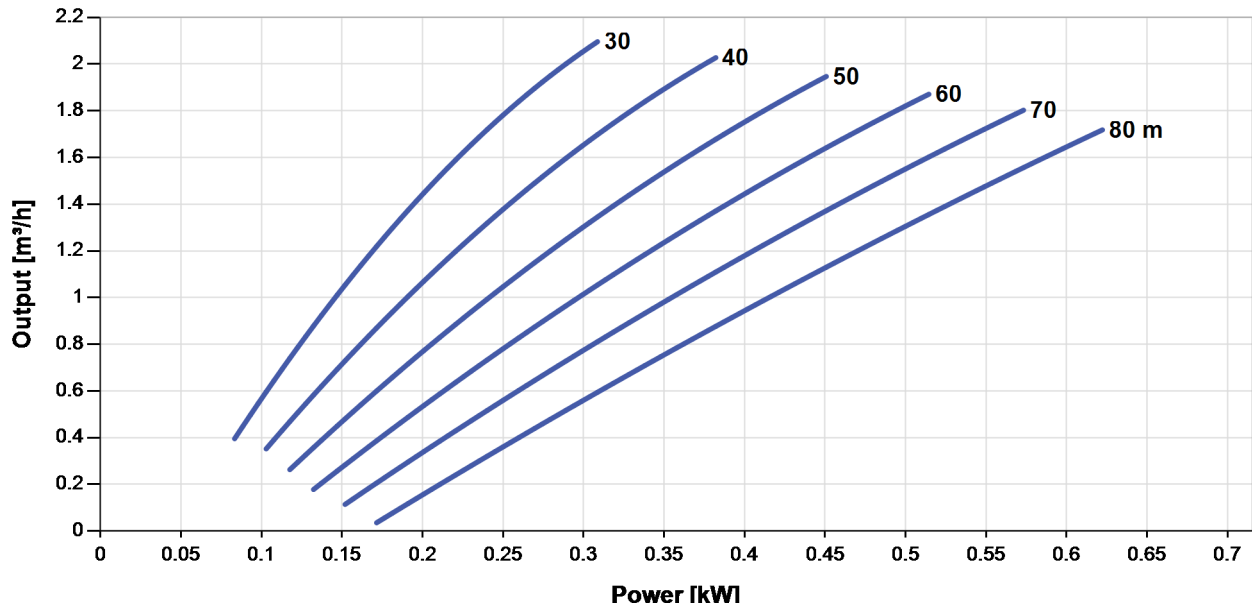


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Pump Chart

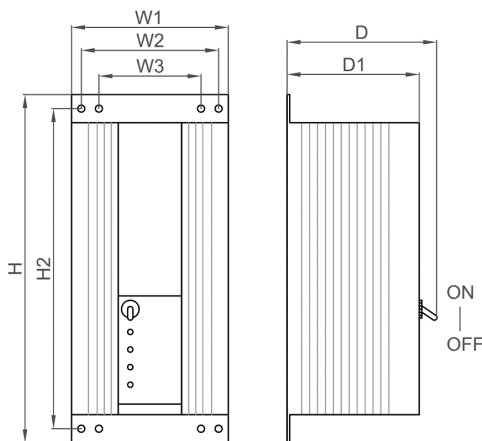
V_{mp}* > 102 V



Dimensions and Weights

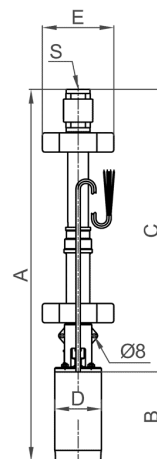
Controller

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



Pump Unit**

A = 771 mm
B = 185 mm
C = 586 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.

