

PS2-1800

Solar Submersible Pump System for 4" wells

System Overview

Head	max. 120 m
Flow rate	max. 1.3 m ³ /h

Technical Data

Controller PS2-1800

- Controlling and monitoring
- 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
- Integrated Sun Sensor

PV Input Power (recommended)	max. 4.00 kW
PV Input voltage	max. 220 V
Optimum V _{mp} **	> 102 V
Motor current	max. 14 A
Efficiency	max. 98 %
Ambient temp.	-30...50 °C
Enclosure class	IP68

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-07***

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

Efficiency	max. 70 %
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Pump Unit PU1800 HR-07 (Motor, Pump End)

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

Standards



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

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.

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

***Specify temperature range on order

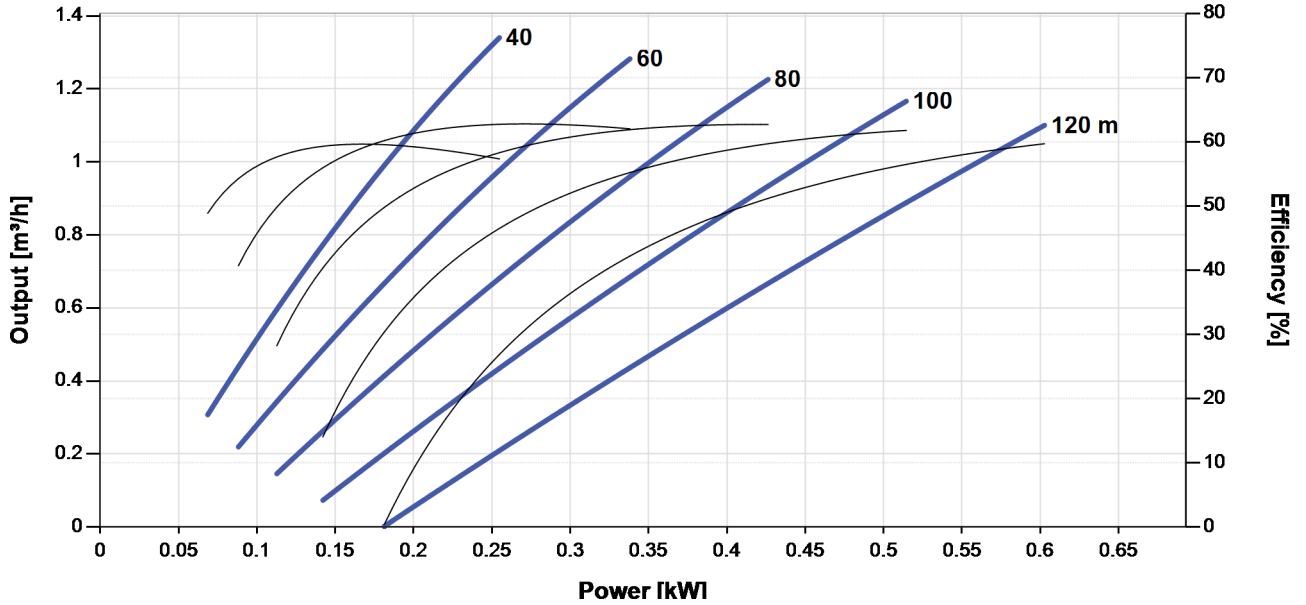


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Pump Chart

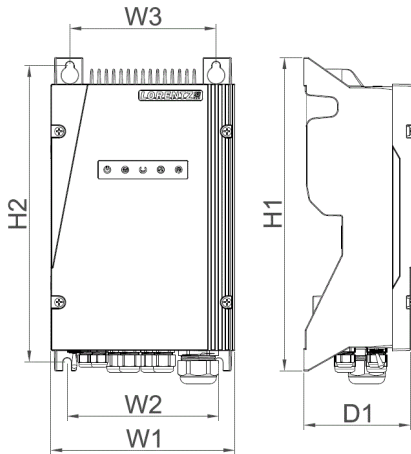
Vmp* > 102 V



Dimensions and Weights

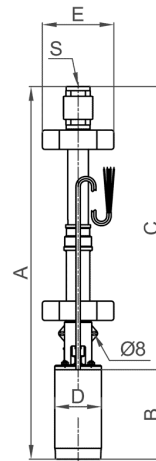
Controller

H1 = 352 mm
 H2 = 333 mm
 W1 = 207 mm
 W2 = 170 mm
 W3 = 164 mm
 D1 = 124 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	6.0 kg
Pump Unit	12 kg
Motor	7.0 kg
Pump End	4.5 kg

*Vmp: 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.

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Created by LORENTZ COMPASS 3.1.0.180

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.

Appendix

Technical data for PS2 Controller*

	PS2-150	PS2-200	PS2-600	PS2-1800	PS2-4000
Rated output power	0.3kW	0.3kW	0.7kW	1.8kW	4kW
Rated output current	22A	11A	13A	14A	14A
Start-up voltage	10V	10V	20V	20V	70V
Min. operating voltage	10V	10V	20V	20V	70V
MPPT voltage range	10 to 55V	10 to 110V	20 to 165V	20 to 220V	70 to 385V
Max. input current	20A	10A	15A	15A	15A
Short circuit current	30A	30A	30A	30A	30A
Operating temp. range	-30 to +50° C	-30 to +50° C	-30 to +50° C	-30 to +50° C	-30 to +50° C

*Designed and engineered in Germany. Manufactured in China.

