

SPECYFIKACJA TECHNICZNA

Version

Electrical	PS-MPPT-25	PS-MPPT-40
Max. Battery Current	25 Amps	40 Amps
Load Current Rating	25 Amps	30 Amps
Max. PV Open Circuit Voltage*	120 Volts (without damage to unit)	
Nominal Battery Voltage	12V or 24V	12V or 24V
Nominal Max. Operating Power**		
12 volt battery	350W	550W
24 volt battery	700W	1100W
Peak Efficiency	98%	98%
Battery Voltage Range	8-35V	8-35V
Voltage Accuracy	<= 0.1% +/- 50mV	
Self-Consumption	31mA	31mA
LED Indications	(1) status, (3) Battery S.O.C.	
Transient Surge Protection	4500 Watts (solar, battery, load)	

Environmental		
Operating Temperature	-40 C to +60 C	-40 C to +60 C
Storage Temperature	-40 C to +80 C	-40 C to +80 C
Humidity	100% non-condensing	
Tropicalization	Conformal coating, marine-rated terminals	



Shown with optional Meter and Wire Box

Load & Lighting Control

- LVD, LVR Settings: 11.4V/12.6V or custom (x2 for 24 volt systems)
- Lighting Settings: Dusk-down or custom

Mechanical

- Dimensions
Standard: 200(W) x 170(L) x 70(D) mm
w/ Wire Box: 200(W) x 285(L) x 92(D) mm
- Weight
Standard: 1.4 kg
w/ Wire Box: 1.5 kg
- Wire Size Range
Power terminals: 2.5 - 35 mm² / 14 - 2 AWG
- Battery/Temp. sense: 0.25 - 1.0 mm² / 24 - 16 AWG
- Knockouts (wiring box option): M20, 1/2", 1" (trade sizes)
- Enclosure: IP20, Type 1

Electronic Protections

- Automatic recovery without fuses
- Solar Input: overload, short-circuit, high voltage, reverse polarity, high temperature, nighttime reverse current
- Load Output: overload, short-circuit, high temperature, reverse polarity
- Battery: reverse polarity (no battery removal)

*Exceeding Maximum PV Open Circuit Voltage may damage the controller.

**Input power can exceed Nominal Maximum Operating Power, but controller will limit and provide its rated continuous maximum output current into batteries. This will not harm the controller (reminder: do not exceed Voc).

WARRANTY: Five year warranty period. Contact Morningstar or your authorized distributor for complete terms.

Battery Charging

- 4-stage charging: bulk, Absorption, Float, Equalize
- 7 standard Battery settings and customization
- Temperature Compensation
Coefficient: -5 mV / C /cell (25 C ref.)
Range: -30 C to +60 C
Setpoints: Absorption, Float, Equalize

Data & Communications

- Communication Port: MeterBus
- Protocols: Morningstar MeterBus, MODBUS
- Datalogging: 190 days, daily records
- PC Software: MSView

Accessories

- Ground Fault Protection Device (GFPD-150)
- Remote Temperature Sensor (RTS)
- Remote Meter (RM-1)
- Wire Box (PS-MPPT-WB)
- RS-232 Communications Adapter (MSC-1)
- USB Communications Adapter (UMC-1)
- Meter Hub (HUB-1)
- Relay Driver (RD-1)

Certifications

- CE; RoHS; UL1741/CSA.107.1; IEC 62109; FCC Part-15 class B compliant
- Manufactured in a certified ISO 9001 facility