HELIOS 核力

80A/100A MPPT Solar Charge Controller

Green & Solar For Life

80A/100A MPPT solar charge controller.

3-stage charging optimizes battery performance.

Suitable for battery types such as Lead-acid AGM/GEL/FLD & Lithium battery.

Support 12V/24V/36V/48V automatic detection, lithium battery requires the user to set the system voltage.

The external port can be used by multiple devices in parallel (max 9 devices in parallel).

Supports RS485 communication with Modbus protocol, support customer customization protocol and communication media.

Industrial grade design with full range of electronic protections, such as Controller Over-temperature, Environmental Over-temperature, Battery&PV Reverse, Battery&PV Over-voltage protection.

80A/100A MPPT Solar Charge Controller

Product Parameters

Controller Parameter	Value	
Model No.	M4880F	M48100F
Battery System Voltage	12V/24V/36V/48V Auto (GEL/FLD/SEL/USE) Manual(Li/USE)	12V/24V/36V/48V Auto (GEL/FLD/SEL/USE) Manual(Li/USE)
No-load Loss	10mA	
Charging Mode	3-stage: Constant Current(MPPT), Constant Voltage, Floating	
Max PV Input Power	1200W/12V; 2400W/24V 3600W/36V; 4800W/48V	1500W/12V; 3000W/24V 4500W/36V; 6000W/48V
Max PV Input Voltage	<150 Voc	
Light Control Voltage	5V*n	
Light Control Delay Time	10s	
Rated Solar Charge Current	80A	100A
Max Efficiency	≥98.1%	
Communication Port	RS485	
Auto Temperature Compensation	-3mV/2V/°C	
Operating Altitude	≤ 3000 m	
Bluetooth	Optional	
Heat Dissipation Method	(Fan+heating sink) double heat dissipation	
Temperature Terminal	Yes (temperature compensation + ambient temperature detection)	
Protection	PV Over-Voltage, PV Reverse Protection, Battery Over-Charge, Battery Over-Discharge, Battery Reverse Protection, Controller Over-Heating, High Ambient Temperature	
Parallel Machines Method	Support 9 parallel machines	

Protection Function		
Temperature Protection	80°C	
Fan-on Temperature	>45°C	
Fan-off Temperature	<40°C	

Properties		
Size	260*200*93mm	
Net Weight	2.28kg	2.49kg
IP Protection	IP32	
Operating Temperature	-25°C ~ +55°C	
Storage Temperature	-40°C ~ +75°C	