MPPT Series
MPPT Solar Charge Controller

POWER /11
P O W E R   S Y S T E M
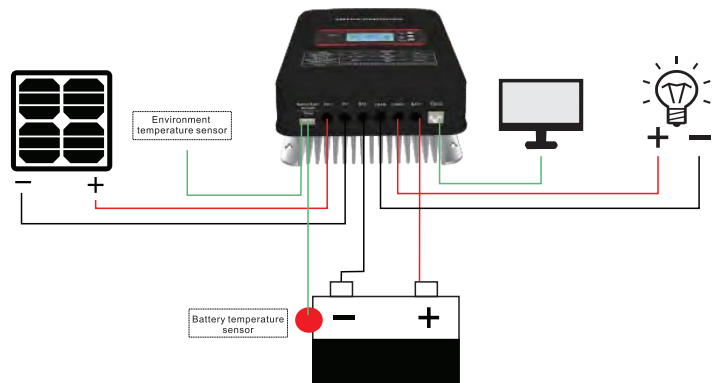

Protection

- PV input overvoltage proctection
- PV input overcurrent protection
- Output overvoltage protection
- Output overcurrent protection
- PV/Battery anti-reverse protection
- Over temperature protection
- Battery low/high voltage protection
- Load over current protection
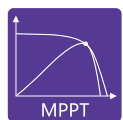- Load short circuit protection

Features

- Advanced dual or multi-peak tracking technology, when the panel is shaded or some of the panel is damaged, the I-V will appear multiple peaks, and the controller can still accurately track the maximum power point.
- The built-in maximum power tracking algorithm can significantly improve the energy efficiency of photovoltaic system, which is about 15% and 20% higher than the traditional PWM charging efficiency.
- Combing multiple tracking algorithms, it can accurately in a very short tiem. To the best working point of I-V curve.
- MPPT tracking efficiency can reach up to 99.9%.
- Maximum conversion efficiency of 98%.
- LED and LCD display operation status.
- TVS lightning protection.
- Three-stage battery charging (quick, equilibrium, and float)
- Natural cooling.
- Temperature compensate for battery.
- Support for Gel, Sealed, Fluid, lithium batteries and other different types of battery.
- Supporting charging current limitation.
- Support capacitive load instant high current start.
- Support battery voltage automatic recognition.

Specifications

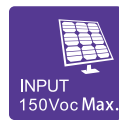| Model	PM4810	PM4820	PM4830	PM4840	PM4850	PM4860	PM4880
PV Input (PV)							
Max. PV voltage (VOC)	75V		135C(-20°C) 145V(25°C)				
System voltage	12V/24V		12V/24V/48V auto, 36V Set				
MPPT voltage range	Battery voltage +3V-60V		Battery voltage +3V-120V				
Suggest input VOC voltage	22V/40V		22V/40V/60V/80V				
Number of MPPT trackers	1	1	1	1	1	1	1
Max. PV input power 12V	140W	270W	400W	540W	670W	800W	100W
24V	270W	540W	800W	1070W	1340W	1600W	2150W
36V	400W	800W	1200W	1600W	2000W	2400W	3200W
48V	540W	1080W	1600W	2140W	2670W	3200W	4300W
Charging Output (DC)							
Max. output current (revisable)	10A	20A	30A	40A	50A	60A	80A
Rating load current	20A						
Max. capacitive load capacity	10,000uF						
Ripple voltage	< 0.5%						
Applicable battery type (ex-factory default lead-acid battery)	Sealed lead-acid battery/Gelled battery/Flooded battery/lithium, other battery types can be customzied.						
Efficiency							
Conversion efficiency	≤ 98%						
MPPT efficiency	> 99%						
Regular Data							
Unloaded loss	< 1.5W	< 1.5W	< 1.5W	< 1.5W	< 1.5W	< 1.5W	< 1.5W
Operating temperature	-20 ~ +45°C						
Elevation height	≤ 3000m						
Operating temperature	-20 ~ +45°C						
Working humidity	0% to 95% (no condensat)						
Cooling concept	Natural						
IP Rate	IP20						

MPPT Charging

Multi-peak tracking

automatic recognition

3-stage charging

Photovoltaic input 150 VOC

PC Communication

LCD Display

IP Rate