

Specifications

Models	MPPT-30A	MPPT-40A	MPPT-50A	MPPT-60A	
Charging mode	3-stage: constant current(MPPT), constant voltage, floating				
System type	DC12V/24V/36V/48V Recognition automatically				
Selectable battery type(default is Sealed)	Vented/ Sealed / Gel / NiCd / Lithium battery(defined voltage for other battery by user)				
Boost voltage	12V				
Max efficiency	≥98.1%				
PV utilization	≥99%				
System voltage automatic recognition	12V system DC	DC9V~DC15V			
	24V system DC	DC18V~DC29V			
	36V system DC	DC30V~DC39V			
	48V system DC	DC40V~DC60V			
Max PV input voltage (Voc)	12V system DC	20V~80V			
	24V system DC	37V~105V			
	36V system DC	50V~160V			
	48V system DC	72V~160V			
	DC190V(The controller can't work at this voltage of long duration that will break controller. Please refer to Max PV Input voltage)				
MAX PV Input Power(Don't exceed)	12V system	360W	480W	600W	720W
	24V system	720W	960W	1200W	1440W
	36V system	1080W	1400W	1800W	2100W
	48V system	1440W	1700W	2200W	2800W
Output specification	Notes: The output terminal is for 5amp lamp only! (12V system less 60W, 24V/36V/48V system less 100W) and it will be burnt if connecting to other loads. The output for battery is no polarity reverse protection.				
Overcharging protection voltage	12V system	15V			
	24V system	30V			
	36V system	45V			
	48V system	60V			
Limited current protection	31A	42A	51A	61A	
Copper wires	6mm² X 10	6mm² X 10	6mm² X 10	6mm² X 10	
Terminals Size	#9AWG	#9AWG	#9AWG	#9AWG	
Air circuit breakers	63A	63A	63A	63A	
Soft start time	≤1S				
Dynamic response and recovery time	100us				
Max efficiency	≥98.1% (Voc is 1.5 or 2 times than battery, then it's best efficiency)				
Temperature Coefficient	±0.02%/ centi-degree				
Automatic temperature compensation	14.2V-(Max temperature-25 centi-degree)*0.3				
Output voltage ripple-peak	100mV				
Output voltage accurac	≤±1%				
Input Anti-intrusion protection	yes				
Temperature Protection	75°C				
Temperature increased protection	Output power will reduce when it's more 70 Output power will be normal when it's less 55 °C				
Fan-on temperature	>40 °C				
Fan-off temperature	<35 °C				
Acoustic noise	≤40dB				
Cooling way	Forced air cooling.				
Forced air cooling.	Imported materials, Accord to EU standards, Industrial grade range.				
Environmental requirements	Meet 2002/95/EC; No cadmium, hydrides and fluorides				
Security Level	Accord to CE, PSE, FCC, EMC, EN60950				
Electromagnetic Compatibility	Accord to EN61000, EN55022, EN55024				
Enclosure	IP21				
Environmental temperature	-20°C ~ +55°C				
Storage temperature	-40°C ~ +75°C				
Net weight(Kg)	1.1				
Gross weight(Kg)	1.2				

NOTE before INSTALL;

1.Connection order: 1)battery 2)panels 3)Load(ensure panels can't get any sunlight when install). The disassembly sequence is contrary to the wiring order .
2.the load system voltage should be the same as solar system.it means if your solar system is 12V,your load's system voltage must be the 12V.
3. Connect the inverter (DC / AC) to the battery. Do not connect to the solar controller.
4. When installing for the first time, please make sure the battery voltage more than 12V so that the Charger controller can recognize system.See recognize range.
5.Don't let controller work for long periods with limit maximum Input power or limit max Solar Input voltage or limit max charge current.The max value could find in label of panels.
6.Tighten the wire to ports, otherwise it will produce sparks easily resulting in high temperatures.then burn easily ports.The controller is kept in a cool and breathable place.
7.Dust and weather will affect MPP(MAX Power Point) tracking.make it clean. Sometimes.The data beat because of it tracking the MAX Power Point.
8. The controller will stop output when the battery under 10.7V(adjustable).
9. When controller makes buzzing sound because of It's working hard to dissipate heat for your controller. Rest your heart, it will be stop when temperature return to normal.
10. Install the Charger controller to the battery as close as possible to avoid voltage and power dropping caused by overlong wire and affect normal voltage judgment.
11. The LCD display has an error of 0.2 V- 0.3 V, but this is normal
12. Do not open the heat sink of the solar controller without permission.