

solar system controller 12V/24V/36V48V 80A [MPPT solar charge controller](#)



Feature

- 1.MPPT charge mode, conversion efficiency up to 99%.
- 2.12V/24V/36V/48V battery system automatic recognition, convenient for customers to use.
- 3.Maximum PV input voltage up to DC150V.
- 4.Controllers can be connected in unlimited parallels.
- 5.Charge mode: three stages (fast charge ,constant charge ,floating charge). To extend the life span of the battery
- 6.Discharge mode: ON/OFF mode, double time control mode, PV voltage control mode ,PV voltage+time delay mode and so on .
- 7.Recommended battery types: sealed lead acid, Vented, Gel, NiCd battery. Other types of the batteries can also be defined, such as lithium battery etc.
- 8.CE,ROHS,FCC certifications approved, other certifications can also be made based on different requirements.
9. 2 years warranty and 2~10 years extended technical service.

Parameter

MASTER

MPPT

Solar charging controller

CE FC RoHS



High efficiency

- MPPT efficiency 99.5%



Stable operation

- Natural cooling and air cooling can be customized
- Support parallel connection



Intelligent compatibility

- Support man-machine interaction
- Support 150Vdc, 300Vdc PV input voltage
- Support remote monitoring of PC and APP
- Support dual RS485 communication
- Multiple protection functions, overvoltage and overcurrent, etc



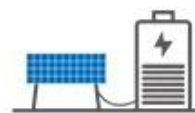
Off grid power system



Solar Engineering



Base station



Energy storage system

Master series		M48L80	M48L100	M48L100Pro	M48L120	M48H80	M48H100	M48H120	M96H50
MPPT efficiency		≥99.5%							
Standby power consumption		4W~5W							
Heat-Dissipating method		Natural cooling		Natural cooling+Air cooling		Natural cooling	Natural cooling+Air cooling		Natural cooling
System voltage		12V/24V/36V/48V Auto				48V			96V
Input Characteristics									
Max.PV input voltage(Voc)		150VDC				300VDC			
Start-up charging voltage		Real-time battery voltage +3V				Real-time battery voltage +10V			
Low input voltage protection		Real-time battery voltage +2V				Real-time battery voltage +5V			
Over voltage protection / Recovery		150VDC				300VDC			
Reted PV Power	12V system	1040W	1300W	1300W	1560W	---	---	---	---
	24V system	2080W	2600W	2600W	3120W	---	---	---	---
	36V system	3120W	3900W	3900W	4680W	---	---	---	---
	48V system	4160W	5200W	5200W	6240W	4160W	5200W	6240W	---
	96V system	---	---	---	---	---	---	---	5200W
Charge Characteristics									
Battery types		Sealed(SEL),Gel(GEL),Flooded(FLD),User-defined(USER),Li-ion(LIT)							
Rated charge current		80A	100A	100A	120A	80A	100A	120A	50A
Temperature compensation		-3mV/°C/2V							
Charge method		3 stages: CC (Constant current) - CV (Constant voltage) - CF (Floating charge)							
Output voltage stability accuracy		±0.2V							
LOAD Characteristics									
Load voltage		Same as battery voltage							
Rated load current		80A	100A	100A	120A	80A	100A	120A	50A
Load control mode		On/Off , PV voltage control mode, Dual-time control mode, PV + Time control mode							
Low voltage protection		10.5V (default), 11V (restored), settable(9V-15V)							
Setting method		PC software / APP / Controller							
Display & Communication									
Display		HD LCD backlight display							
Communication		Dual RJ45 port / RS485 / support PC software monitoring / support WiFi module for APP cloud monitoring / support centralized parallel monitoring							
Other Parameters									
Protections		Input & output over-volt / low-voltage protection, reverse polarity protection, over-heating protection, battery shedding protection etc.							
Operating ambient temperature		-20°C~+50°C							
Storage temperature		-40°C~+70°C							
IP(Ingress protection)		IP31							
Altitude		0~3000m							
Max. Witing size		50mm²							
N.weight /G.weight (KG)		7.4 / 9		12/13.4		7.4 / 9		12/13.4	
Product size /Packing size (mm)		420x280x110 / 510x368x225		470x320x128 / 610x450x265		420x280x110 / 510x368x225		470x320x128 / 610x450x265	