

# MPPT Solar Charge Controller

## Specification



This series is the MPPT Solar Controller. we update the display with back-light LCD display, load control way, connect way, internal structure, reduce the static standby self-consumption, energy saving and more simply for small system.etc. It features an efficient MPPT control algorithm to track the maximum power point of the PV array. Greatly improve the utilization of solar panel. Its intelligent LCD and upper PC display, mostly convenient for customers to check, records and parameter setting. It widely used in off-grid solar system, communication base station solar system, household solar systems, street light solar systems, field monitoring and other fields etc.

**System Voltage:** DC12V/24V/36V/48V Automatic Recognition

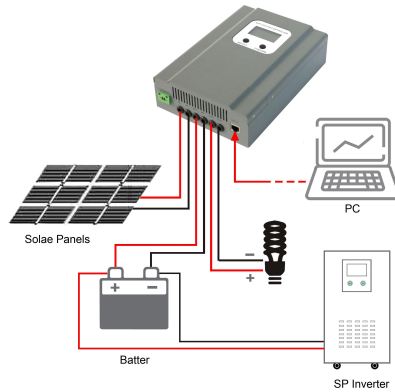
**Rated Current:** 20A 30A 40A 50A 60A

**Maximum PV(voc) Voltage:** 20A 30A 40A(130V); 50A 60A(150V)

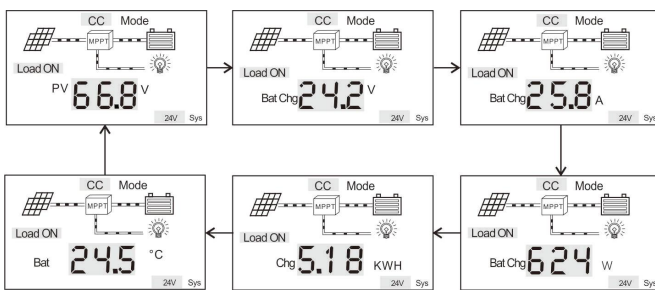
### Features:

- ◆ High efficiency MPPT control algorithm, MPPT efficiency  $\geq 99.5\%$ , whole Machine conversion efficiency up to 98%;
- ◆ 12V/24V/36V/48V system Automatic Recognition , users can use it in different system conveniently.
- ◆ Maximum PV input voltage: **20A 30A 40A(130V); 50A 60A(150V)**
- ◆ Charge mode: three stages (fast charge, constant charge, floating charge). It prolongs service life of the batteries.
- ◆ Discharge mode: ON/OFF mode, PV voltage control mode, Time control, PV & Time control mode.
- ◆ **Recommended battery types: Flooded, Sealed lead acid, Gel battery. Other types of the batteries can also be defined.**
- ◆ Most information could be provide by LCD like: model No., PV input voltage, battery type, battery voltage, charging current, charging power, working status and so on. **Also customer's information like company name, website and logo can be added into Solar Eagle software.**
- ◆ **RS485 communication, we can offer communication protocol also, it's convenient for user's integration management.**
- ◆ CE, RoHS, FCC certifications approved. We can help clients to approve other certifications.
- ◆ **2 years warranty. And 3~10 years extended warranty service also can be provided.**

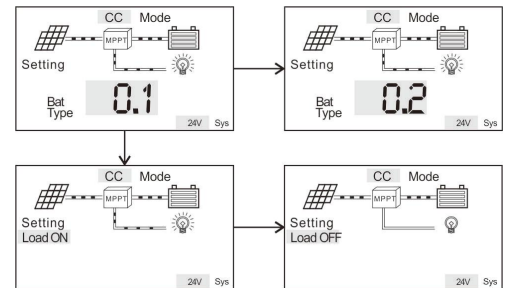
## MPPT Controller connection diagram



## Parameters Display & Setting information

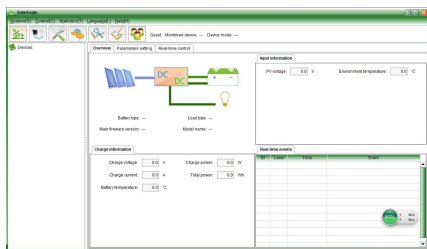


LCD display information

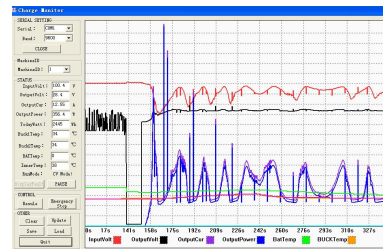


Set the battery type and LOAD control mode

## Upper Computer Software & Test Software



PC software



Monitoring software

Visual display of charge and discharge status, PV voltage, charge voltage, charge current, and can set the battery type, LOAD output control;

## Parameter

Model		20A	30A	40A	50A	60A
Charge Mode	MPPT(Maximum Power Point Tracking)					
MPPT Efficiency	≥99.5%					
System Type	12V/24V/36V/48V	Automatic recognition				
<b>Input Characteristic</b>						
PV Max. voltage (VOC)	12V/24V/36V/48V system	DC130V			150V	
High Input voltage Protection point	12V/24V/36V/48V system	DC130V			150V	
Rated PV Power	12V system	260W	390W	520W	650W	780W
	24V system	520W	780W	1040W	1300W	1560W
	36V system	780W	1170W	1560W	1950W	2340W
	48V system	1040W	1560W	2080W	2600W	3120W
<b>Charge Characteristic</b>						
Charge Mode	MPPT(Maximum Power Point Tracking)					
Charge Method	3-Stage: constant current(fast charging)-constant voltage-floating charge					
Select-able Battery Types (Default type is Gel battery)	12V/24V/36V/48V system	Flooded, Sealed lead acid, Gel battery (Other types of the batteries also can be defined)				
Rated charge current	12V/24V/36V/48V system	20A	30A	40A	50A	60A
<b>Output Discharge Characteristic</b>						
Output voltage	Based on battery voltage					
Max. DC Load current	30A					
The output control	On mode, Off mode, PV voltage control mode, Time control, PV + Time control					
<b>Display/Communication</b>						
LCD display/PC upper (RS485)	System type, PV voltage, charge voltage, charging current, charging power, temperature					
<b>Other Parameters</b>						
Protect function	Yes					
Thermal methods	fan cooling					
Packing Size DxWxH(mm)	289*204*101			330*245*150		
Net Weight (kg)	2.3			2.8		
Gross Weight (kg)	2.8			3.5		
Protection	IP 25					