



ES-MPPT 12/24V, 20A/30A/40A

MPPT solar charge controller

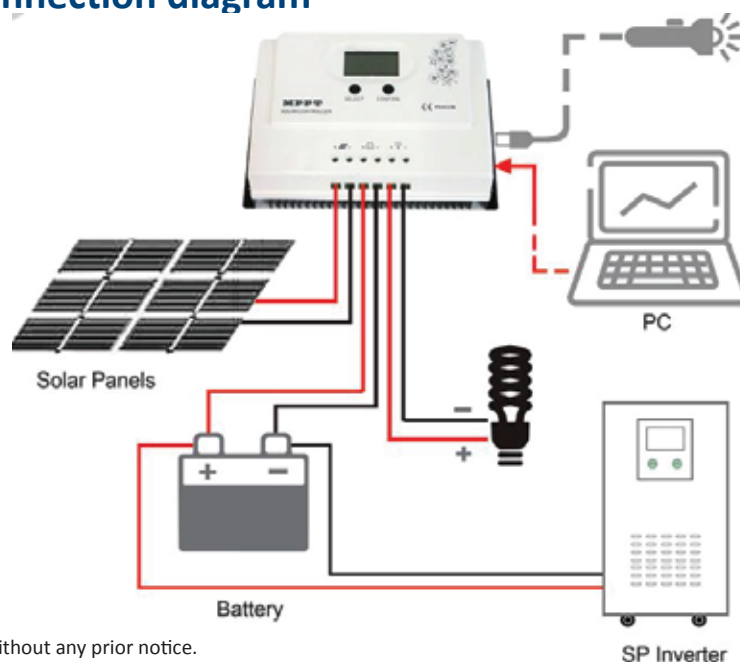


High efficiency solar charge regulators consist of advanced MPPT (maximum power point detectors) controllers for autonomous photovoltaic systems. ES-MPPT have an intelligent tracking algorithm that maximizes solar energy harvesting from photovoltaics.

▶ Features

- > High efficiency MPPT control algorithm, MPPT efficiency \geq 99.5%, whole Machine conversion efficiency upto 98%;
- > 12V/24V system Automatic Recognition, users can use it in different system conveniently.
- > Maximum PV input voltage: 100VDC(15A, 20A), 150VDC (30A, 40A, 50A)
- > 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.
- > Recommended battery types: sealed lead acid, vented, gel, NiCd battery. Other types of the batteries can also be defined.
- > Most information could be provided by LCD like: system type., 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.
- > RS232 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



* Specifications could be subject to change without any prior notice.

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*This version replaces all previous ones

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Technical Characteristics

Model	ES-MPPT 12/24V			
	DC12V/24V system	20A	30A	40A
Charge mode	MPPT(maximum power point tracking)			
MPPT efficiency	≥99.5%			
System type	12V/24V	Automatic Recognition		
• INPUT CHARACTERISTICS				
Max PV array Voc (VDC)	12V/24V	DC100V	DC150V	DC150V
Start the charging voltage point	12V 24V		18V 32V	
High input voltage protection point	12V/24V	DC100V	DC150V	DC150V
High input voltage recovery point	12V/24V	DC95V	DC150V	DC145V
Rated PV power	12V 24V	260W 520W	390W 780W	520W 1040W
• CHARGE CHRECTRESTICS				
Selectable Battery Types	12V/24V	Sealed lead-acid batteries, Vented batteries Gel, NiCd battery (Other types of the batteries also can be defined)		
Charge method	12V/24V	Three stages charge: constant current(MPPT), constant voltage, floating charge		
Charge rated current	12V/24V	20A	30A	40A
• OUTPUT DISCHARGE CHARACTERISTICS				
USB (Total for 2 USB output)	DC5V 3A			
LOAD output voltage	Based on battery voltage			
Max. DC Load current	30A			
Output control mode	ON/OFF mode, PV voltage control mode			
Output control set way	Controller button or PC software			
• DISPLAY				
LCD Display	System type, PV voltage,charge voltage, charging current, charging power, temperature etc.			
PC software	RS232			
• OTHER PARAMETERS				
Protection function	Yes (Over voltage, low voltage, over temperature, over load, Short circuit protection etc.)			
Cooling mode	Auto cool			
Type of Mechanical Protection	IP 30			
Measurement DxWxH (mm)		200*110*66	243*155*79	243*155*79
Packing DxWxH (mm)		249*144*105	289*189*113	289*189*113
N.W. (KG)		0.9	1.8	1.8
G.W. (KG)		1.3	2.2	2.2

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