

Optimal Solar MPPT Battery Charge System



Features

- Integrated with Maximum Power Point Tracking (MPPT), battery charge management and stage of charge information
- Continuous output power rating without de-rating at up to 50°C ambient temperature
- Built-in Battery Energy Monitor that tracks power production and consumption to calculate the energy remaining in battery. State of Charge (SOC) is displayed in percent full, Amp-hours, Watt-hours, and 90 days of energy-harvest history is stored in the solar charger
- Supports Flooded Lead Acid (FLA), GEL and Absorbed Glass Mat (AGM) batteries, 2/3/4-stage charging with adjustable set points for all parameters
- Wire the PV modules in series up to 112VDC normal (140VDC Max) for SS-50C-MPPT Series, SS-80C-MPPT Series and 192VDC normal (240VDC Max) for SS-40CX-MPPT Series, SS-80CX-MPPT Series
- Easy stacking of up to 16 units in parallel for high currents
- Precise charging for 12V/ 24V/36V/48V batteries with easy set-up and using battery voltage sense (BVS) wires
- Built-in temperature compensation function for safe and complete charging

Specifications

Model No.	SS-50C-MPPT	SS-80C-MPPT	SS-40CX-MPPT	SS-80CX-MPPT
Maximum output current (Continuous at up to 50°C ambient temperature)	50 Amps	80 Amps	40 Amps	80 Amps
Battery Voltages	12, 24, 36, 48 VDC Normal			
Max PV Input Current	40 Amps	70 Amps	30 Amps	70 Amps
Input Voltage Range	16~112VDC Operating		16~192VDC Operating	
	140VDC Maximum Open Circuit Voltage		240VDC Maximum Open Circuit Voltage	
Max PV Array Power	3250 Watts (Maximum when equalizing a 48V battery to 64V at 50 Amps)	5200 Watts (Maximum when equalizing a 48V battery to 64V at 80 Amps)	2600 Watts (Maximum when equalizing a 48V battery to 64V at 40 Amps)	5200 Watts (Maximum when equalizing a 48V battery to 64V at 80 Amps)
	Charge Regulation Modes: Bulk, Absorption, Float, Auto / Manual Equalization			
Battery Temperature Compensation	5.0 mV per °C, per 2 volt cell			

DC to DC Conversion Capability	12V Battery: 16~112VDC	12V Battery: 16~192VDC
	24V Battery: 32~112VDC	24V Battery: 32~192VDC
	36V Battery: 48~112VDC	36V Battery: 48~192VDC
	48V Battery: 64~112VDC	48V Battery: 64~192VDC
Display Status	Built-in 2-line, 20-character LCD with backlight LCD status screen displays input voltage and current, output voltage and current, charge-mode, Battery SOC	
Data Logging	Logs energy harvested for 90 days, LCD displays WH, KWH, AH	
Energy Monitor	LCD shows SOC, AH, WH, and present charge or discharge current. A 50mV / 500Amp shunt is required to use	
Auxiliary Relays	Two independent relays with from A (SPST) contacts for control of external devices. Contact rating is 3 Amps, 50VDC	
Operation Temperature	Full Power Output to +50°C ambient	
Standby Power	< 2 Watts	< 4 Watts
OPTIONS		
PC Monitoring Unit (PMU-SS)	Monitoring the values displayed in PC	
Shunt	Measuring the current drawn into and out of the battery	
Dimension (DxWxD) mm	267.6 x 196 x 147	414.8 x 225 x 147
Weight (kgs)	4.3	7.1