## HeliStar battery charger

### HeliStar battery charger 12/24/36/48V-60~120Amp MPPT

# **Optimal Solar MPPT Battery Charge System**









#### Features

- · Integrates Maximum Power Point Tracking (MPPT), battery charge management, state of charge information
- Continuous output Power Rating without de-rating at up to 50°C ambient temperature
- Built-in Battery Energy Monitor 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, Four-stage charging with adjustable set points for all parameters
- Wire the PV modules in series up to 112VDC normal (140VDC Max) (J-80C) and 160VDC normal (200VDC Max) (J-120C)
- · Easy stacking of up to 16 units in parallel for high currents
- · Precision charging of 12V/ 24V/36V/48V batteries with easy set-up and using voltage sense wires
- · Built-in temperature compensation function for safe and complete charging

## **Specifications**

Model No.	J-60C	J-80C	J-100C	J-120C
Maximum output current (Continuous at up 50°C ambient temperature)	60 Amps	80 Amps	100 Amps	120 Amps
Battery Voltages	12,24,36,48 VDC Normal			
Max PV Input Current	50 Amps	70 Amps	90 Amps	110 Amps
Input Voltage Range	16~112VDC Operating		16~160VDC Operating	
	140VDC Maximum Open Circuit Voltage		200VDC Maximum Open Circuit Voltage	
Max PV Array Power	12V Battery: 1100W		12V Battery: 1750W	
	24V Battery: 2200W		24V Battery: 3500W	
	36V Battery: 3300W		36V Battery: 5200W	
	48V Battery: 4400W		48V Battery: 7000W	
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: 17~102VDC	12V Battery: 17~102VD0	
	24V Battery: 34~160VDC	24V Battery: 34~112VD0	
	36V Battery: 51~160VDC	36V Battery: 51~112VD0	
	48V Battery: 68~160VDC	48V Battery: 68~112VD0	
Display Status	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 display WH, KWH, AH		
Energy Monitorg	LCD shows SOC, AH, WH, and discharge current. A 50mV/ 500Amp shunt is required to use		
Auxiliary Relays	Three independent relays with from A(SPST) contacts for control of external devices		
Operation Temperature	Full Power Output to +50°C ambient		
Standby Power	< 2 Watts		
Dimensions (LxWxH)	400 x 200 x 90 mm	400 x 251 x 115 mm	
Weight	6 kgs	10 kgs	

