

# PPPSL-Solar Charge Controller



## Advanced Features:

- Intelligent Maximum Power Point Tracking (MPPT) Technology – Ensures maximum solar energy harvest under all conditions.
- Built-in High-Performance DSP Controller – Enhances system reliability and control precision.
- Automatic Battery Voltage Detection (*Only for 600W and 3KW models*) – Simplifies installation and configuration.
- Battery Temperature Sensor (BTS) (*Only for 3KW model*) – Automatically adjusts charging parameters for improved battery life.
- Three-Stage Charging – Maximizes battery performance and longevity.
- Automatic Load Detection – Provides seamless load management.
- Multi-Functional LCD Display – Shows real-time system status and detailed operating data.
- Reverse Polarity Protection – Prevents damage due to incorrect connections of solar panel or battery.
- Overcharge and Overload Protection – Ensures system safety and battery protection.
- Compatible with Various Battery Types – Offers flexibility for different application needs.

## MPPT Technology with DSP Controller for Maximum Efficiency

The SCC-MPPT solar charge controller combines advanced Maximum Power Point Tracking (MPPT) technology with a high-performance DSP controller, intelligently converting the best voltage to charge batteries under various temperature conditions. Unlike traditional charge controllers, SCC-MPPT enables your solar panels to operate at their optimal power output voltage, achieving up to 98% efficiency with minimal power loss. By integrating the SCC-MPPT with an inverter, solar panels, and external battery packs, you can create a complete standalone solar power system. This system effectively converts solar energy to charge external batteries, and the inverter subsequently powers your home appliances with clean, green energy.

## PERPETUAL POWER SERVICES PRIVATE LIMITED

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MODEL	SCC-MPPT 300W	SCC-MPPT 600W		SCC-MPPT 850W	SCC-MPPT 3KW					
<b>INPUT</b>										
MPPT Range @Operating Voltage	15VDC~37VDC	15VDC~33VDC	30VDC~66VDC	45VDC~88VDC	60VDC ~ 115 VDC					
Maximum PV Array Open Circuit Voltage	50VDC	50VDC	75VDC	98VDC	145VDC					
Maximum PV Array Power	300W	300W	600W	850W	800W	1600W	3200W			
Maximum Current	18A			17A	50A					
<b>OUTPUT</b>										
Nominal Battery Voltage	12VDC	12VDC	24VDC	36VDC	12VDC	24VDC	48VDC			
Connected Battery Type	Sealed lead acid,vented,Gel,NiCd battery				Sealed lead acid,AGM or Gel					
Maximum Charging Current	25A			20A	60A					
Maximum Efficiency	98%									
Charging Method	Three stages: bulk, absorption, and floating									
<b>PROTECTION</b>										
Overload Protection	>110%: audible alarm									
Overcharge Protection	Yes									
Polarity Reversal Protection @Solar Cell & Battery	Yes									
<b>INDICATORS</b>										
LCD Panel	LCD panel indicating solar power, load level, battery voltage/capacity, charging current, and fault conditions									
LED Display	Three indicators for solar, charging, and load status									
<b>PHYSICAL</b>										
Dimension, D x W x H (mm)	135x170x57.5	220x170x57.5			315x165x128					
Net Weight (Kgs)	0.92	1.85			4.5					
IP Protection	IP 43			IP 31						
<b>ENVIRONMENT</b>										
Humidity	0~100% RH (Non-condensing)				5~95% RH (Non-condensing)					
Operating Temperature	-20°C to 55°C				0°C to 55°C					
Storage Temperature	-40°C to 75°C				-15°C to 60°C					
Altitude	0~3000m									

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