

Solar MPPT Charge Controller Series

Smart Charge Controller for Renewable Energy Applications

Advanced Maximum Power Point Tracking (MPPT) technology allows SC-60MP/80MP to increase charge current up to 30% or more compared to conventional charge controllers. The SC-60MP/80MP developed by Sysgration can be used universally for 12V/24V/36V/48V. Its broad DC input voltage range makes reasonable system configuration possible for almost all PV modules.

User friendly LCD display is available to monitor PV charge performance. The SC-60MP/80MP Solar MPPT Charge controller also provide an advanced fully charge control management system to ensure the battery is properly and fully charged, resulting in enhanced battery performance with less battery maintenance. It tracks power production and consumption to calculate the energy remaining in the battery. The SC-60MP/80MP supports Flooded Lead Acid (FLA), GEL and Absorbed Glass Mat (AGM) batteries. Three stage charging with adjustable set points for all parameters. The RS-485 provides data communication to PCs and the Internet. System performance can be monitored remotely.



Features

- Increases PV Array Output by up to 30%
- Battery Voltages from 12 VDC to 48 VDC
- Full Output Capacity in Ambient Temperatures up to 104°F (40°C)
- Advanced Continuous Maximum Power Point Tracking Algorithm
- Fully RS-485 Network Integrated and Programmable
- Programmable Auxiliary Control Output
- 3-stage charging control prevents the battery from being over-charged at any ambient temperature
- The charge controller automatically limits the charge current to a safe level to protect the batteries according to battery manufacturers specification
- Small charger size, light weight, lowest cost for generating maximum power
- User friendly LCD display is available to monitor PV charge performance

Specification

Model	SC-60MP	SC-80MP
Input		
Rated Voltage	15Vdc~150Vdc	
MPPT Range/Operating Voltage	30Vdc~120Vdc @ 12Vbat 30Vdc~120Vdc @ 24Vbat 45Vdc~120Vdc @ 36Vbat 56Vdc~120Vdc @ 48Vbat	
Max. Solar Open Circuit Voltage	150Vdc	
Max. PV Array Power	3000W	4000W
Output		
Nominal Battery Voltage	12/24/36/48Vdc	
Battery Operating Voltage Range	10-60Vdc	
Max. Output Current	60A	80A
Maximum Efficiency	> 95%	
Charging algorithm	3-stages	
Charging stages	Bulk , Boost , Float	
Support Equalization Mode	Yes	
Electrical Protections		
Output Over-Current Protection	Yes	
Output Over-Voltage Protection	Yes	
Environment Over-temperature Protection	Yes	
Environment		
Protection Degree	IP20	
Operation Temperature	-4 ~ +104°F(-20 ~ +40°C)	
Storage Temperature	-40 ~ +185°F(-40 ~ +85°C)	
Humidity	0 ~ 95% non-condensing	
Altitude	0~3000m	
Other		
Display	2-line , 16-character LCD	
Communication	RS485	
Compliance		
Quality	ISO9001	
Standard EMC	FCC , CE	
Mechanical		
WXDXH(mm)	355 X 200 X 165	

Specifications subject to change without notice.