

# KEY FEATURES



- 100% MPPT Efficiency: Advanced tracking technology enhances solar panel output by up to 30% compared to traditional controllers.
- Versatile Voltage Support: Designed for 12V systems with efficient charging modes for AGM, GEL, and LiFePO4 batteries.
- Compact and Portable: Lightweight and space-saving design ideal for portable setups.
- Safety Features: Includes reverse polarity protection, PV over-voltage protection, and overcharge prevention, ensuring reliable operation.
- User-Friendly Interface: Equipped with an LCD screen for real-time monitoring and plug-and-play SAE connectors for effortless setup.





### **Battery Protection**

Comprehensive protection design prevents overcharging and deep discharging of the battery, extending its service life.



#### **100%MPPT**

Advanced MPPT (Maximum Power Point Tracking) technology intelligently adapts to various environments, maximizing the utilization of solar panels.



#### LCD Screen

LCD display allows for checking charging parameters and status anytime, anywhere.



#### **Reverse Polarity Protection**

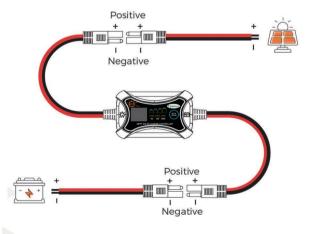
The reverse polarity protection for both solar panels and batteries ensures safety and facilitates easy operation.



### Easy Plug And Play Connection

Compact size, easy installation with quick-connect SEA plugs for immediate use, and standard extension cables for flexible application.

# Wiring







# APPLICATIONS

- Portable Solar Solutions: Perfect for small solar charging systems such as camping kits.
- RV and Mobile Power: Efficient charging on the go for caravans and vehicles.
- Residential Battery Backups: Ideal for compact rooftop solar setups in urban areas.





### PARAMETERS



Model No.	M1210P				
System Voltage	12V				
Charging Mode	MPPT				
Battery Types	GEL/AGM/LiFePo₄				
No-load Loss	12V/20mA; 24V/12mA				
Operating Temperature	-20°C ~ +45°C				
Storage Temperature	-40°C ~ +80°C				
Communication Port	Built-in Bluetooth Module(Option	nal)			
LCD Meter and Buttons	Color LCD Screen + Button				
IP Protection	IP45				
Net Weight	130g				
Controller Dimension	96.4*61.6*27mm				
Operating Altitude	≤3000m				
Max Charging Current	10A				
Standard Accessories	Two SAE Wires				
Product Protection	PV Over-Voltage, PVReverse Protection,Batte Battery Reverse Protection, ControllerOver-Heating,	ery Over-Charge , HighAmbient T	e, emperat	ure	
Max Solar Input Voltage	<30Voc				
Max Solar Input Power	150W				
Battery Parameters					
Battery Types	GEL (Default)	(LiFePO <sub>4</sub> )			
Equalize Charge Voltage	14.6V*n				
Boost Charge Voltage	14.2V*n 14.4V*n	Default: 14.4V*n			
Float Charge Voltage	13.8V*n 13.8V*n				

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