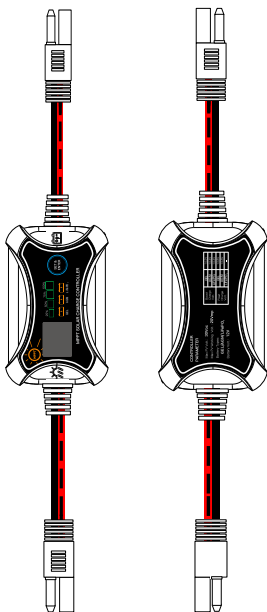


MPPT Solar Charge Controller

M1210P User Manual



Main Feature

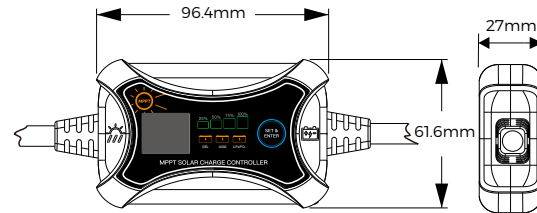
- 10A MPPT solar charge controller with portable design.
- 3-stage charging optimizes battery performance.
- Suitable for battery types such as GEL, AGM and LiFePO₄.
- LCD shows Battery Voltage and Charge Current, etc.
- Indication of LED indicates Battery Soc, Charging Sta and Battery type.
- User-friendly key press operation, more simple and easier.
- Easy to be mounted.
- Overcharge, Over-temperature, Reverse Polarity Protection.

Warning and Caution

- Designed for 12V batteries, please don't connect to higher voltage batteries.
- The PV Voc cannot exceed 35V.
- Please use the device within rated power and voltage range.
- Avoid placing solar panels in partially sunny or shaded environments.
- Keep controller away from water.
- Keep controller in an environmental temperature from -20°C~+55°C. Avoid direct sunlight exposure.
- Please keep the device in a ventilated and heat dissipating environment.

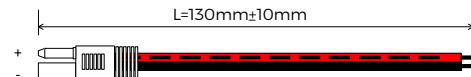
Reminder: The controllers can be installed indoor only.

Product Dimension

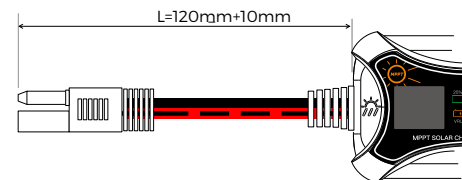


Wire Dimension

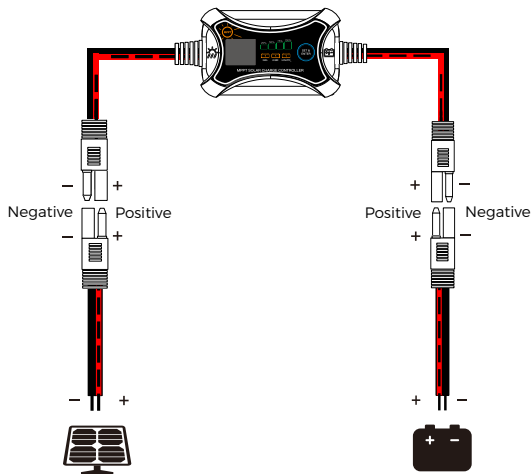
1) Accessories



2) Controller



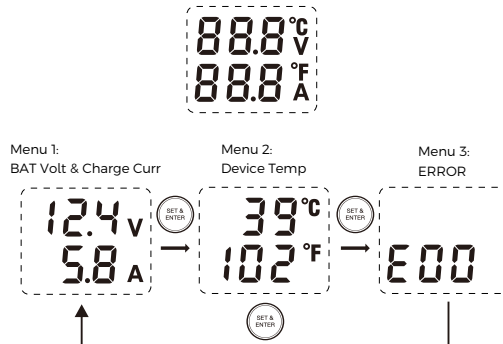
Installation



Key Operation

Function Key	System Mode	Operation	Operation Indication
	View Mode (LCD only)	Long Press	Enter Set Mode
		Short Press	Screen Page Switch
	Set Mode (Battery LED only)	Long Press	Exit Set Mode And Save
		Short Press	Edit Battery Type

LCD Display Indication



Error Code

Code	Error
E00	No Error
E01	Over-Discharge
E02	Battery Over Voltage
E06	Device Over Heating
E10	PV Over Voltage
E13	Solar Reverse Polarity
E14	Battery Reverse Polarity

LED Display Indication

1) Battery SOC Indication



SOC	25%	50%	75%	100%
Bat Volt	11.6V	12.1V	12.6V	13.2V

● Float Flashing ● Steady On

SOC	Charging State	LED1	LED2	LED3	LED4
<25	Charging	●	●	●	●
	Idle	●	●	●	●
<50	Charging	●	●	●	●
	Idle	●	●	●	●
<75	Charging	●	●	●	●
	Idle	●	●	●	●
>75	Charging	●	●	●	●
	Idle	●	●	●	●

2) Battery Type Indication

System mode	Describe
View Mode	● The current battery type is selected
Set Mode	● The current battery type is selected



Abbreviations	Battery Types
GEL	GEL Battery
AGM	AGM Battery
LiFePO4	Lithium iron phosphate battery

Equalize Charge Voltage (7 days cycle)	GEL	-
	AGM	14.6V
Boost Charge Volt.	LiFePO4	-
	AGM	14.4V
Float Charge Volt.	GEL	14.2V
	AGM	14.4V
LiFePO4	LiFePO4	14.4V
	AGM	13.8V
LiFePO4	GEL	13.8V
	LiFePO4	-

Parameter	Value
No-load Loss	20mA
Max Solar Input Voltage	<30Voc
Rated Solar Charge Current	10A
Max Solar Input Power	150W
Operating Temperature	-35°C~+45°C
IP Protection	IP45
Net Weight	145g
Operating Altitude	≤3000 meters
Controller Dimension(mm)	96.4*61.6*27