

Solar Charge Controller

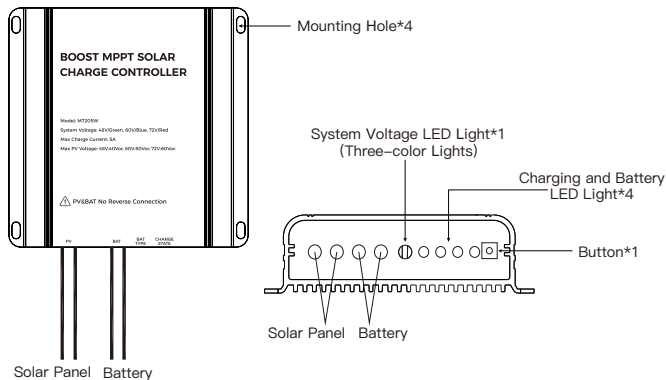
M7205W

1. Controller Features

1. Designed for 48V / 60V / 72V golf carts and EV.
2. Users can choose a single solar panel with flexible options for easier installation.
3. Zero energy loss during nighttime operation.
4. IP68 waterproof design ensures reliable performance in harsh environments with industrial-grade durability.
5. Supports lithium battery activation.
6. Intelligent power derating under high temperatures, extending product lifespan and keep charging in a high efficiency.

2. Device and Wiring Diagram

Cable specifications should be selected based on practical needs.
Cable connectors types support OEM customization (Below pictures are for reference only).



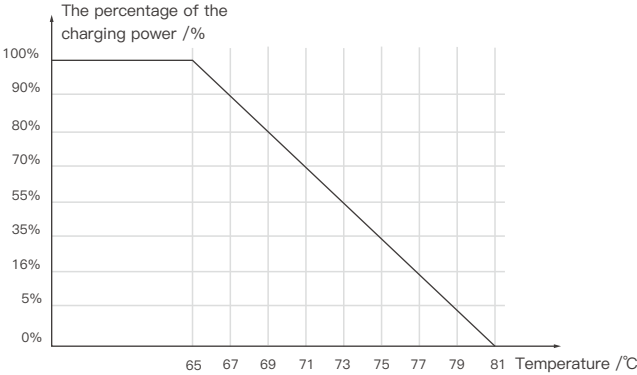
3. Status LED Indications

LED Light	Instructions	State	Functions
3 Color Lights	System Voltage	Flashing/Steady on	Setting the system voltage
		Green Light	48V System
		Blue Light	60V System
		Red Light	72V System
4 LED Lights (From left to right) Battery Level & Charging State	Battery SOC (Only refer)	Light 1: Steady on	Low battery
		Light 1 & Light 2: Steady on	Battery low warning
		Light 1 to Light 3: Steady on	The battery is close to full
		Four lights: Steady on	Battery full
	Charging	Light 1: Steady on The other lights: Running	Low battery, in charging
		Light 1 & Light 2: Steady on The other lights: Running	Battery low warning, in charging
		Light 1 to Light 3: Steady on Light 4: Flashing	The battery is close to full, in charging

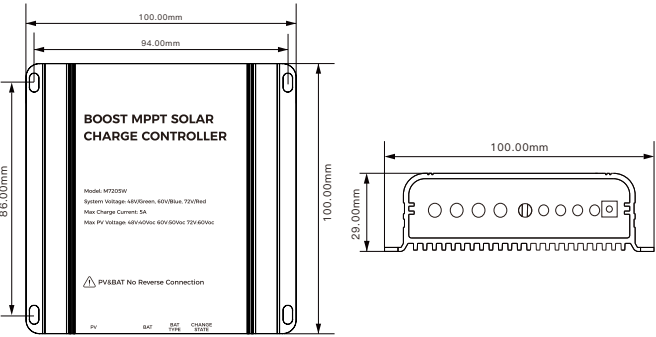
4. Voltage Setting Instructions

1. Press and hold the button for 3-5 seconds until the system voltage indicator starts flashing.
2. Short-press the button to switch the battery system voltages. Switching sequence: 48V(Green) → 60V(Blue) → 72V(Red).
3. After selecting the required voltage, press and hold the button for 3-5 seconds until the indicator switches from flashing to steady light, confirming successful setup.
4. Wiring Sequence: Always connect the battery first, then connect the solar panel(s).

5. Derating Curve



6. Controller Dimensions



7. Controller Specifications

ITEMS	PARAMETERS		
Model NO.	M7205W		
Charging Method	Boost MPPT		
Rated Charging Current	5A		
Lithium Battery Activation	Support		
Battery System Voltage (Li)	48V (Default)	60V	72V
Boost Charging Voltage	56.8V	71.0V	85.2V
Max Solar Input Voltage	40Voc	50Voc	60Voc
Solar Panel Voltage*	15-40V	15-50V	15-60V
Max PV Input Power	430W		
PV Start Charging Voltage	> 18V		
PV Stop Charging Voltage	< 15V		
MPPT Tracking Efficiency	99.9%		
Charging Conversion Efficiency	≤ 97%		
Working Protection Temperature	70℃ (Power Derating)	85℃ (Stop Charging)	
Storage Temperature	-35℃ ~ +55℃		
Battery System Voltage Indicator	1*Three-color LED Light (48V Green, 60V Blue, 72V Red)		
Charging/Power Indicator Light	4*Red LED Lights (Indicates battery level and charging state)		
Protection Function	Battery Over-voltage, Controller Over-temperature		
IP Protection	IP68		
Key Operation	1*Button (Set System Voltage)		
Altitude	≤ 3000m		
Net Weight	500g		
Product Dimension	100*100*29mm		

* The closer the PV voltage is to the battery voltage, the higher the conversion efficiency.

Note:

1. Reverse connection of solar panels and batteries is strictly prohibited.
2. The PV voltage cannot exceed the maximum input voltage.
3. The PV open-circuit voltage must not exceed the battery voltage all the time.
4. Short circuit prohibited.