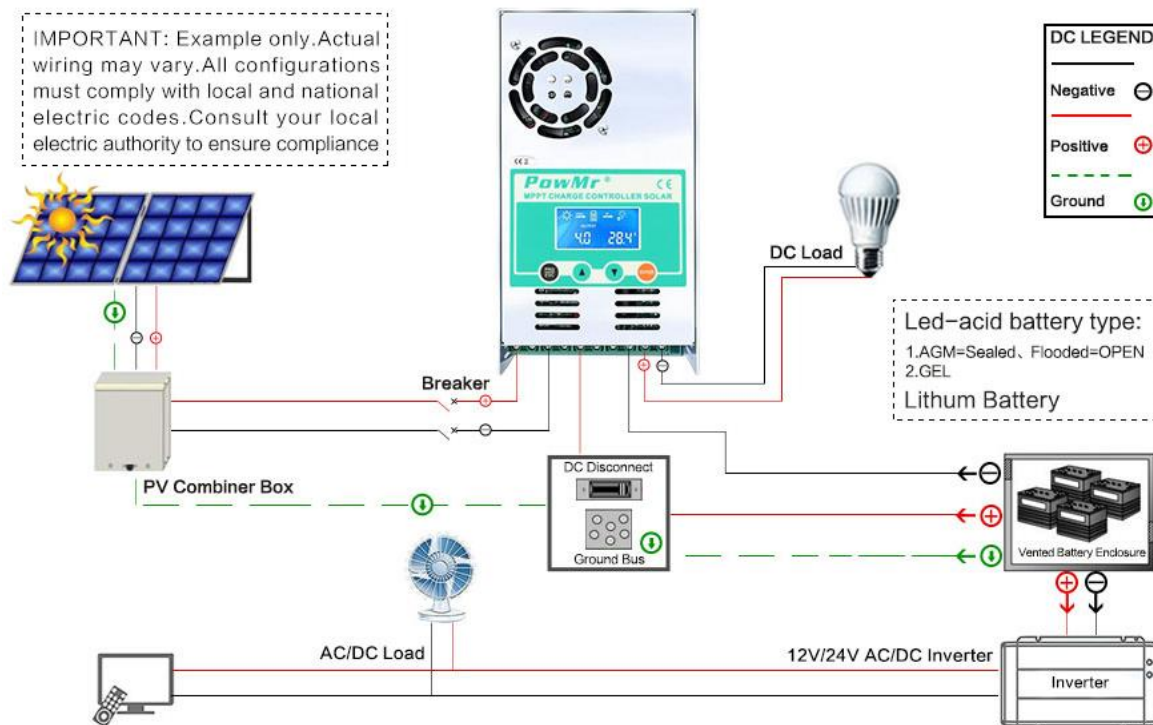




#### Features:

- 100% MPPT controller
- Intelligent Maximum Power Point Tracking technology
- Built-in high performance DSP controller
- Automatic 12V / 24V / 36V / 48V battery voltage detection
- Three-stage charging optimizes battery performance
- Multi-function LCD display
- Reverse polarity protection of the solar panel
- Overload protection
- It can be mounted easily
- Suitable for the battery types of sealed lead acid, Ventilated Gel, and Lithium battery



## Technical Parameters:

|  |  |
|--|--|
| <b>Charging method</b>   | MPPT REGULATOR tracking of Maximum power point automatically   |
| <b>Charging</b>  | 3-phase: constant current (MPPT), constant voltage (Voltage Draw), floating charge   |
| <b>System type</b>   | DC12V / 24V / 36V / 48V Recognition automatically  |
| <b>Automatic voltage recognition system</b>  | 12V system (DC9V-DC15V)<br>24V system (DC18V-DC29V)<br>36V system (DC30V-DC39V)<br>48V system (DC40V ~ DC60V)                            |
| <b>Soft start time</b>   | ≤1S  |
| <b>Dynamic response and recovery time</b>  | 100us  |
| <b>Efficiency Max</b>  | ≥ 98.1% (Voc is 1.5 or 2 times of battery, then it is the best efficiency)   |
| <b>PV of use</b>   | ≥ 99%  |
| <b>Input specification</b>   |  |
| <b>Voc from PV</b><br>(Make sure the Voc of PV meeting the requirement as right. Voc is 1.5 or 2 times of battery then it is the best efficiency.) | 12V system (DC20V ~ DC80V)<br>24V system (DC37V ~ DC105V)<br>36V system (DC50V ~ DC160V)<br>48V system (DC72V ~ DC160V)                  |
| <b>The maximum input voltage PV (Voc)</b>  | DC190V (The controller cannot work at this long-lasting voltage which will break controller. Please refer to the Input voltage from PV.) |
| <b>Maximum PV input power</b><br>(The total rated power of PV cannot be more than this watt which will break the controller.)                      | 12V system (720W)<br>24V system (1440W)<br>36V system (2100W)<br>48V system (2800W)  |
| <b>Output specification</b>  |  |
| <b>Selectable battery type (default is Sealed)</b>   | Ventilated / Sealed / Gel / NiCd / Lithium battery (defined voltage for other battery by user)   |
| <b>Charging Voltage Absorption</b>   | Refer to Reference Charging Batteries  |
| <b>Float Charging Voltage</b>  | Refer to Reference Charging Batteries  |
| <b>Overload protection voltage</b>   | 12V system (15V)<br>24V system (30V)<br>36V system (45V)<br>48V system (60V)   |
| <b>Rated output current</b>  | 60A  |
| <b>Temperature coefficient</b>   | ± 0.02% / centi-degrees  |
| <b>Automatic temperature compensation</b>  | 14.2V- (Max temperature of -25 centi-degrees) * 0.3  |
| <b>Ripple of the peak output voltage</b>   | 100mV  |

|                                      |   |
|--------------------------------------|---|
| Accurate output voltage              | $\leq \pm 1\%$  |
| Anti-intrusion protection input      | Yes   |
| Temperature protection               | 75 ° C  |
| Temperature for increased protection | Output power will reduce when it is more than 70°C<br>Output power will be normal when it is less than 55°C |
| Fan-temperature                      | > 40 ° C  |
| Fan-off temperature                  | < 35 ° C  |
| Acoustic noise                       | $\leq 40\text{dB}$  |
| Cooling way                          | Forced air cooling  |
| Environmental requirements           | Meet the 2002/95 / EC; Cadmium No, hydrides and fluorides   |
| Security Level                       | According to CE, PSE, FCC, EMC, EN60950   |
| Electromagnetic compatibility        | According to EN61000, EN55022, EN55024  |
| Protection                           | IP20  |
| Net weight                           | 1.1Kg   |

### Tips:

1. **Always connect battery first!** Make sure enough batteries' voltage let controller recognize the right system voltage.
2. **DO NOT** connect any Inverter/ wind/ Alternator or Charger into the charge controller! Connect the Inverter directly to the battery.
3. Ensure solar input voltage 3V or more than batteries' voltage and total input power in the range. If input power is too low for max input power, it may be appears to have been discontinued, the charging current almost be zero when controller is floating charge.
4. Parameter Setting Rules: Floating voltage > Low voltage reconnect > Low voltage discharge.
5. The solar controller will stop output when the battery under 10.7V. The LCD will be blank when the battery under 8V and it will re-output when the battery up to the 12.6V (adjustable).
6. Install the Charger controller to the battery as close as possible. Tighten the wire.
7. When controller makes buzzing sound, this is because it's working hard to dissipate heat for your controller. Rest your heart, it will be stop when temperature return to normal.
8. Remove all the debris around the controller (leaving a space of approx. 5.91in).

*Made in China*