

# ML4860 Charge Controller



12V, 24V, 36V, or 48V 60A for Flooded, SLA, AGM, Gel, Lead Acid Battery and LiFePO4 (Lithium) Battery Packs MPPT Solar Charge Controller

12V, 24V, 36V, or 48V 60A MPPT  
For Flooded, SLA, AGM, Gel, Lead Acid Battery  
and LiFePO4 (Lithium) Battery Packs  
Solar Charge Controller  
11.2 \* 8.1 \* 3.6 in. (285 \* 205 \* 93 mm)  
7.9 Lbs. (3.6 Kg)

## 3 Year Manufacturer's Warranty!

Features of the 12V, 24V, 36V, or 48V 60A for Flooded, SLA, AGM, Gel, Lead Acid Battery and LiFePO4 (Lithium) Battery Packs MPPT Solar Charge Controller:

- Advanced dual-peak or multi-peak tracking technology.
- Built-in maximum power point tracking algorithm to improve energy utilization efficiency of photovoltaic systems.
- Charging efficiency 15%-20% higher than traditional PWM solar charge controllers.
- Combination of multiple tracking algorithms that can accurately track the optimum working point of the I-V curve in a very short time.
- MPPT tracking efficiency can be as high as 99.9%
- Advanced digital power supply technology to raise the circuit energy conversion efficiency to as high as 98%.
- Different charging program options including those for gel batteries, sealed batteries, open batteries, and customized ones.
- Current-limiting charging mode. When the solar panel power exceeds a certain level and the charging current is greater than the rated current, the solar charge controller automatically reduces charging power and brings the charging current to the rated level.
- Instantaneous large current startup of capacitive loads.
- Automatic recognition of battery voltage.
- LED fault indicators and a liquid crystal display screen to display abnormality information and help users quickly identify system faults.
- Historical data storage function to store data for up to a year.
- LCD screen on the controller to enable users to check device operating data and statuses and modify controller parameters.
- Standard Modbus protocol to meet the communication needs of various occasions.
- Electrically-isolated communications to assure the user about usage.
- Parallel operation supported by certain parts of the solar charge controller.
- Built-in mechanism for over-temperature protection. When the temperature exceeds the set value, the charging current will decline in linear proportion with temperature, therefore slowing down the rise of controller temperature and avoiding controller damage from high temperatures.

- ~~Damage from high temperatures.~~
- External battery voltage sampling function to prevent line loss from affecting external battery voltage sampling and to ensure greater control parameter preciseness.
- Temperature compensation function to automatically adjust charging and discharging parameters to extend the battery service life.
- Battery over-temperature protection function for when the external battery temperature exceeds the set value. Charging and discharging will be shut off to protect components from being damaged.
- TVS lightning protection.

Technical Specifications of the 12V, 24V, 36V, or 48V 60A for Flooded, SLA, AGM, Gel, Lead Acid Battery and LiFePO4 (Lithium) Battery Packs MPPT Solar Charge Controller:

- Battery Voltage/Power: 12V/800W, 24V/1600W, 36V/2400W, or 48V/3200W
- Max Solar Input Voltage: 150V
- Rated Charge Current: 60A
- Rated Load Current: 20A
- IP Rating: IP32
- Conversion Efficiency: <98%
- MPPT Tracking Efficiency: >99%
- Working Temperature: -31F~113F (-35C~+45C)