



PRODUCT OVERVIEW

EV-ML4860 controller is an advanced maximum power point tracking (MPPT) charging technology for off-grid, security monitoring and household photovoltaic systems.

FEATURES

- Advanced dual-peak/multi-peak tracking technology tracks the maximum power point of solar panels even if solar panels are shaded or fail
- MPPT energy utilization efficiency is 15% to 20% higher than the conventional PWM method
- Multiple tracking algorithms enables rapid and accurate tracking of the optimum working point of the I-V curve
- Automatic charging voltage regulation function
- MPPT tracking efficiency up to 99.9%
- Advanced digital power technology increases the circuit energy conversion efficiency to 98%
- Supports charging lithium batteries, gel batteries, sealed batteries and vented batteries
- Limited current charging mode – automatically lowers charging power when solar panel power exceeds a specified level and charging current exceeds rated current
- Instantaneous large capacitive load current startup
- Automatic identification of storage battery voltage
- Can store historical data for up to one year
- Compatible with standard Modbus protocol
- All communications are electrically isolated
- Overheat protection mechanism – protects the controller from damage by overheating
- Temperature compensation function – automatically adjusts charging and discharging parameters to extend battery lifespan
- External battery voltage sampling accounts for line loss
- TVS lightning protection

Product Description

PART#	DESCRIPTION	RATED CURRENT	SYSTEM VOLTAGE	MAX SOLAR INPUT VOLTAGE
EV-ML4860	MPPT Controller	60A	12V/24V/36V/48V	150V (77°F) / 145V (-13°F)

Specifications

MODEL#	EV-ML4860
System Voltage	12V/24V/36V/48V Auto
No-Load Loss	0.7 W to 1.2W
Battery Voltage	9V to 70V
Max Solar Input Voltage	100V (77°F) / 90V (-13°F)
Max Power Point Voltage Range	Battery voltage + 2V to 120V
Rated Charging Current	60A
Rated Load Current	20A
Max Capacitive Load Capacity	10000 uf
Max PV System Input Power	800W (12V) / 1600W (24V) / 2400W (36V) / 3200W (48V)
Conversion Efficiency	≤ 98%
MPPT Tracking Efficiency	> 99%
Temperature Compensation Factor	3mv/°C/2V (default)
Operating Temperature	-31°F ~ 113°F
Protection Degree	IP32
Weight	7.93 LBS
Communication Method	RS232 / RS485
Altitude	< 9842ft
Product Dimensions	11.22" x 8.07" x 3.66"

Product Images

