

MPPT Solar Charge Controller

ML2420/ML2430/ML2440/ML4860



Product characteristics

- 10-40% higher than PWM mode.
- MPPT tracking efficiency is up to 99.9%.
- Full-range electronic protection functions.
- Built-in temperature detection.
- Modbus protocol.
- 12/24/36/48V identification.
- lead-acid batteries/lithium batteries.
- Current-limiting charging mode.
- Historical data storage.
- LCD display.

Product accessories

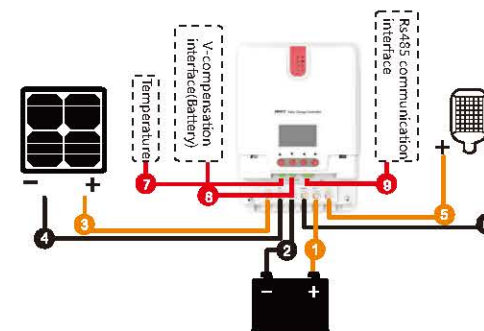
RM-5 display, BT-1 Bluetooth module, USB to RS232 cable, BTS temperature sensor.



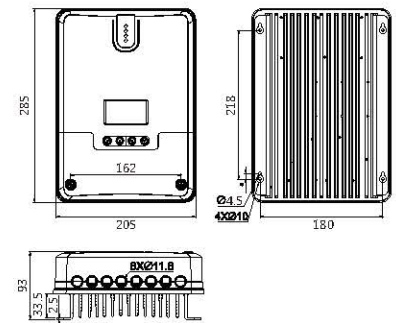
Parameters

Model	ML2420	ML2430	ML2440	ML4830N15	ML4860
System Voltage		12V/24V		12V/24V/36V/48V	12V/24V/36V/48V
Static power consumption			0.7 ~ 1.2W		
Battery voltage		9~35V		9~72V	9~72V
Maximum input voltage of solar energy (25°C)		100V		145V	145V
Voltage Range at MPPT (Maximum Power Point)		Battery voltage +2~ 75V		Battery voltage +2 ~ 120V	Battery voltage +2 ~ 120V
Rated charging current	20A	30A	40A	60A	60A
Rated load current			20A		
PV system maximum input power	260W/12V 520W/24V	400W/12V 800W/24V	550W/12V 1040W/24V		800W/12V 1600W/24V 2400W/36V 3200W/48V
Support battery type		AGM Battery, GEL Battery, Flooded Battery, Lithium Battery			
Temperature compensation coefficient					-3mV/°C/2V (default)
Operating temperature					-35°C ~ +45°C
Humidity					95%, no condensation
Protection grade			IP32		
Weight	1.4Kg	2Kg	2Kg	2.3Kg	3.6Kg
Communication mode		RS232		RS232 / RS485	
Product dimensions	210×151×59.5(mm)	238×173×72.5(mm)	238×173×72.5(mm)	226×182×81(mm)	285×205×93(mm)
Terminal blocks		10mm ² /8AWG		20mm ² /4AWG	
Functional authentication				IEC62509 : 2010	
Safety certification					ETL

Product connection diagram



Technical requirements



Product dimensions : 285*205*93mm
 Hole positions : 218*180mm
 Hole diameter : \varnothing 4.5
 Applicable wire : diameter < 11mm