



ML series

Solar Charge Controller

ML2420/2430/2440/-C



For off-grid application

- Can be connected to both PV, battery and load
- Multiple load operating modes to meet diverse needs

User-Friendly

- Easy to install and simple to use
- Natural cooling, absolutely quiet

Safety

- Complete charge and discharge protection mechanism
- High quality components for stable operation

All-in-One

- Supports multiple battery types
- Highly integrated, helps you save space and wire

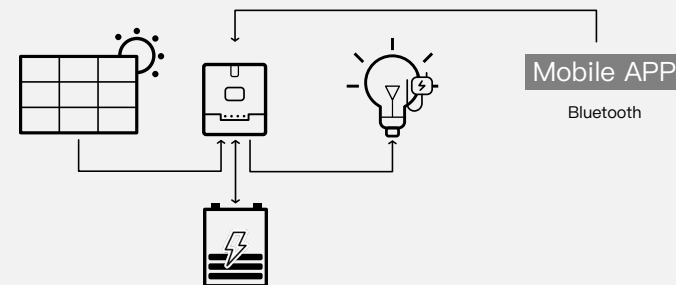
Efficient

- MPPT with up to 99.9% efficiency
- Support solar panel 2 in series/more in parallel

Intelligent

- Supports RS232, RS485, (RV-C protocols)
- Supports Bluetooth with mobile APP

MODEL	ML2420/ML2420-C	ML2430/ML2430-C	ML2440/ML2440-C	Can Be Set
PV INPUT				
Max.Voltage of Open Circuit	100Vdc			
MPPT Voltage Range	(Battery voltage+2V) ~ 75V			
Max.PV Input Power	260W / 12V 520W / 24V	400W / 12V 800W / 24V	550W / 12V 1100W / 24V	✓
BATTERY				
Battery Type	Lead-acid / Li-ion / User Defined			✓
Rated Battery Voltage	12/24Vdc			
Battery Voltage Range	9~35Vdc			✓
Rated Charging Current	20A	30A	40A	✓
MPPT Charging Mode	Buck			
LOAD				
Load Type	Resistive load 、Capacitive load、Inductive load			
Rated Load Voltage	Equal to battery voltage 12/24V			
Rated Load Current	20A			
Load Working Mode	Light control,Light control + Time control, Manual control (default), Debugging mode, Normal open			✓
EFFICIENCY				
MPPT Tracking Efficiency	>99%			
Max. Charging Conversion Efficiency	≤98%			
ACCESSORIES				
Standard	BTS temperature sensors/-C, BTS temperature sensors, RS485 8 pole communication cable			
Optional	RM-5 display, BT-1 Bluetooth module, USB to RS232 connection cable, GP-2 IoT module, 6 pole communication cable			✓
GENERAL				
Communication	RS232/-C RS485			✓
Weight	1.4kg (3.09lb)	2kg (4.41lb)		
Dimension	210*151*59.5mm (0.69*0.50*0.20ft)	238*173*72.5mm (0.78*0.57*0.24ft)		
Protection Degree	IP32			
Operating Temperature Range	-35°C~-45°C (-31°F~113°F)			



Wiring diagram