

THUNDERVOLT POWER MPPT SOLAR CHARGE CONTROLLER

M48 Series

MPPT Solar Charge Controller BT-APP / Negative Grounded

M series

M4850N/M4860N

Product Features

- Advanced MPPT scanning technology & effective temperature management, ensuring efficient, reliable and lasting solar DC charge.
- Oversize heating sink design, along with PCBA glued with polyurethane & silicon mixture, for better system cooling and waterproof, to improve solar charge efficiency.
- In-built Bluetooth communication module, for APP monitoring and operation in mobile phone. External BT module also supportable.
- Supports multiple modes of DC load output control. "DC load short circuit protection" allowed to be canceled manually; "Equalize charge" allowed to be enforced manually.



CE RoHS
IEC62509:2010



Full-range protection



Overcharge Protection



Over-discharge Protection



Short-circuit Protection



Reverse Protection



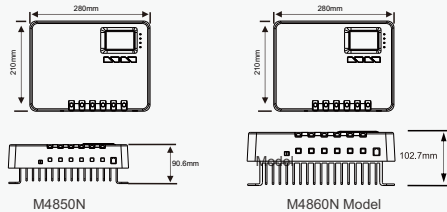
Overheat Protection



Overload Protection

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M48 Series

Product dimension		Accessory		APP	
 M4850N M4860N Model				 Charge Pro 2.0	
Controller Parameter	Value				
Model No.	M4850N		M4860N		
System Wiring	Negative Grounded				
Battery System Voltage	12V/24V Auto (FLD/GEL/SEL/USE) Manual (LI/USE)				
No-load Loss	12mA/12V;10mA/24V;5mA/36V;6mA/48V				
Max Solar Input Voltage	<150Voc				
Rated Solar Charge Current	50A		60A		
Max Solar Input Power	750W/12V;1500W/24V 2200W/36V;2700W/48V		900W/12V;1800W/24V 2600W/36V;3200W/48V		
Light Control Voltage	5V*n				
Light Control Delay Time	10s				
Max Load Output Current	20A				
Operating Temperature	-35°C ~ +45°C				
IP Protection	IP32				
Net Weight	3.0kg		4.55kg		
Communication Port	RS485+Bluetooth (APP)				
Operating Altitude	≤ 3000 m				
Controller Dimension	280*210*90.6mm		280*210*102.7mm		
Battery Voltages	Battery Parameters				
Battery Types	FLD	SEL	GEL (default)	USE (adjustable)	LI (adjustable)
Equalize Charge Voltage	14.8V*n	14.6V*n	—	Default	—
Boost Charge Voltage	14.6V*n	14.4V*n	14.2V*n	Default: GEL	Default: 14.2V*n
Float Charge Voltage		13.8V*n		Default: GEL	—
Boost Charge Recovery Voltage		13.2V*n		Default: GEL	—
Over-discharge Recovery Voltage		12.6V*n		Default: GEL	—
Over-discharge Voltage		11.1V*n		Default: GEL	Default: 11.1V*n
Auto Temperature Compensation	-3mV/2V/°C			Default: GEL	—
Accessory List	Package Status				
External Temperature Sensor	Yes				
Remote LCD Meter	Optional				
Bluetooth Module	Yes / Inbuilt				
Parallel Charge Use Cable	Optional				
Installation Guidance Paper	Yes				
User Manual	Yes				