

LTM Series

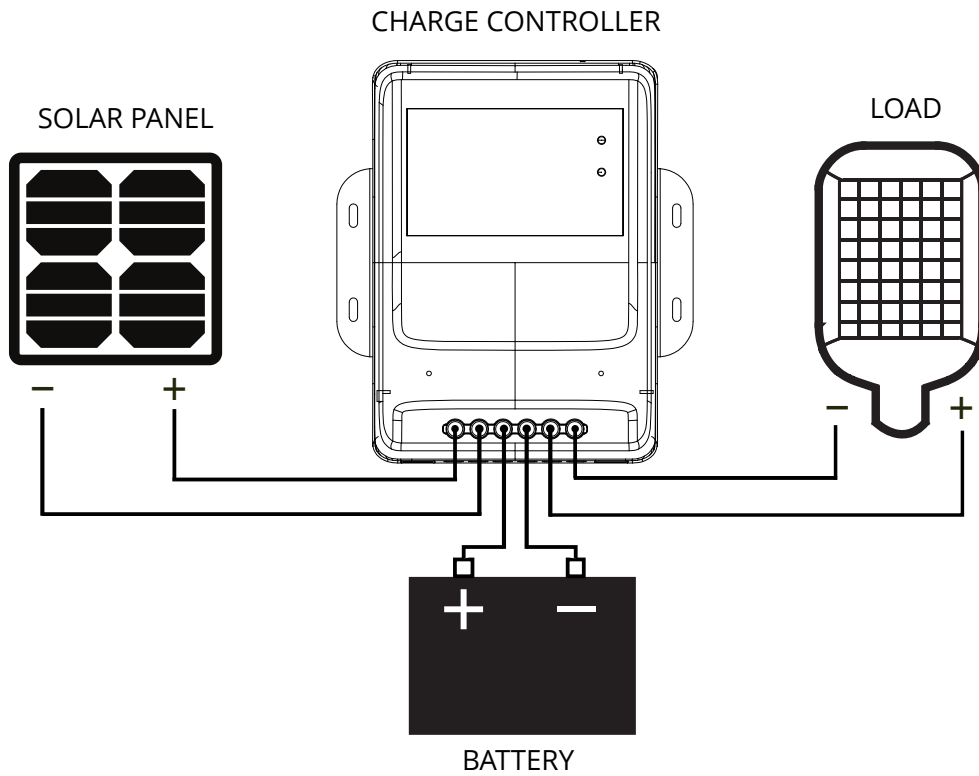
MPPT Solar Charge Controller



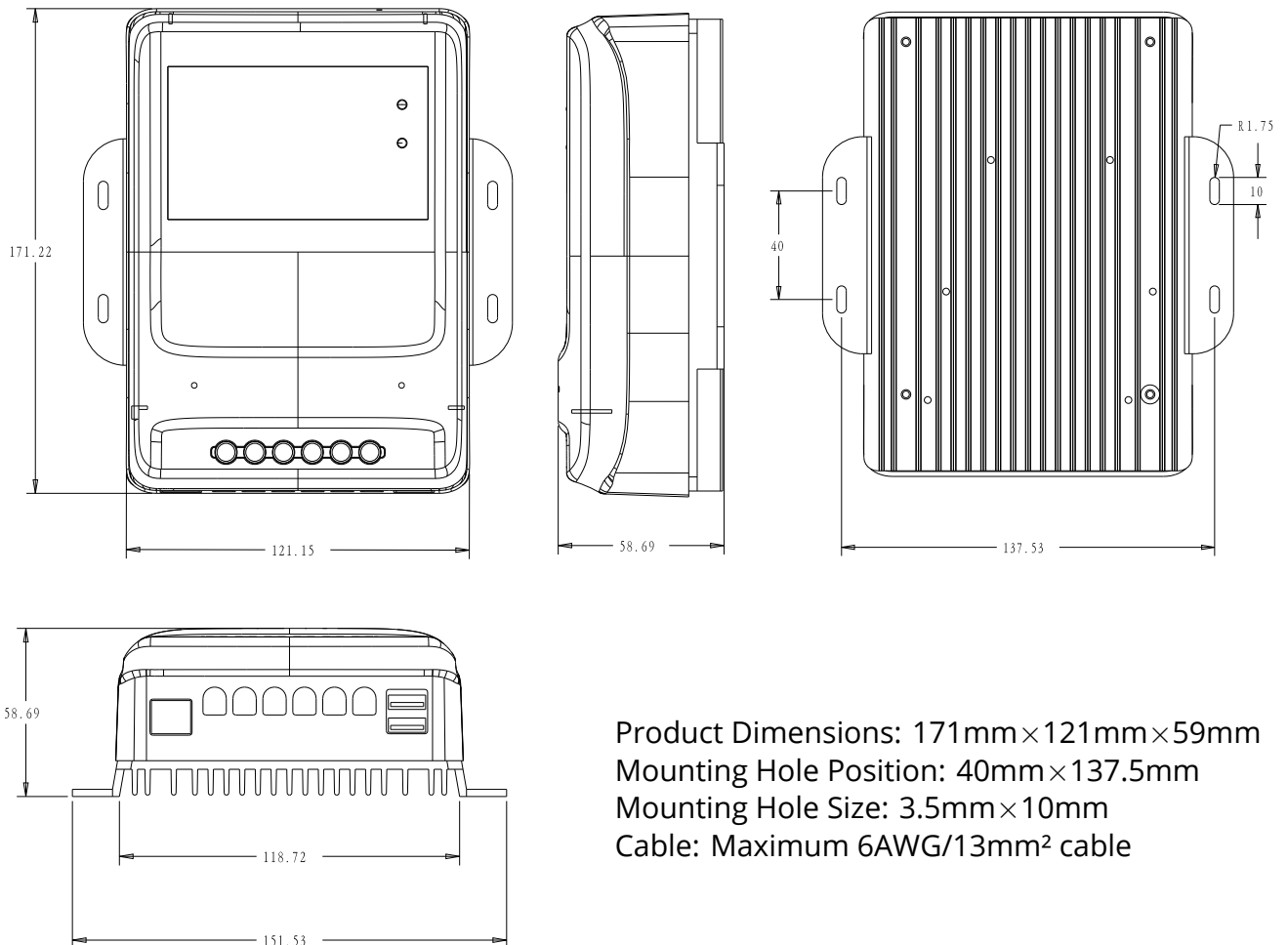
Product Features

- Adopts dynamic conductance incremental method, can quickly track the maximum power point of solar panel, MPPT tracking efficiency up to 99%.
- Adopts advanced digital synchronous buck circuit, energy conversion efficiency up to 99%.
- PV input voltage tolerance 120V.
- Battery supports 12V/24V/36V/48V auto-recognition, supports sealed, gel, flooded lead-acid batteries and lithium battery charging, supports custom battery parameters.
- Lithium battery can be automatically activated via PV, achieving 0V battery startup.
- Provides USB 5V/2A port.
- Supports capacitive and inductive loads.
- Controller has built-in charging and load current limiting functions, users can set max charging and max load current via mobile APP.
- Provides comprehensive protection functions: charging overvoltage, overcurrent protection, overheat protection; load short circuit, overcurrent protection; battery low voltage, overvoltage protection; PV panel reverse connection, lightning protection.
- Supports RS485 communication with standard Modbus protocol, adjustable baud rate.
- Simultaneously supports Bluetooth and WiFi connection to mobile APP, allowing local or remote configuration of battery type and load parameters, and real-time monitoring of device operating status.

Product Connection Diagram



Product Dimensions



Product Specifications

Model	LTM4830	LTM4840
System Voltage	12V/24V/36V/48V	
Standby Power	0.7W~1.2W	
Battery Voltage	10V~57.6V	
Max PV Voltage	120V	
Max Charging Current	30A	40A
Max Load Current	30A	
Max PV Power	390W/12V 780W/24V 1100W/36V 1440W/48V	520W/12V 1040W/24V 1440W/36V 1920W/48V
Conversion Efficiency	92%~99%	
MPPT Tracking Efficiency	≥99%	
USB Port	5V2A	
Wireless Communication	Bluetooth BLE5.0/WiFi 2.4G	
RS485 Communication	RS485 Interface, Default Baud Rate 115200	
Terminal	Max 6AWG/13mm ²	
LED Indicator	Yellow(Battery), Green(Charging), Red(Load), Blue(Communication)	
Protection Functions	PV: Overvoltage, Reverse Connection, Short Circuit, Reverse Charge, Lightning Protection; Battery: Overvoltage, Over-discharge; Load: Overcurrent, Short Circuit; Overheat Protection;	
Operating Temperature	-25°C~+50°C	
Housing Material	Flame-retardant ABS + Aluminum Alloy Heat Sink Back Cover	
Protection Degree	IP30	
Cooling Method	Natural Heat Dissipation	
Weight	750g	800g
Dimensions	171mm×121mm×59mm	