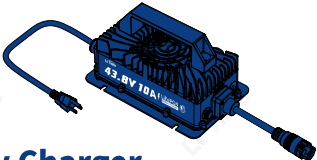


43.8V 10A



LiFePO4 Battery Charger

PRODUCT MANUAL

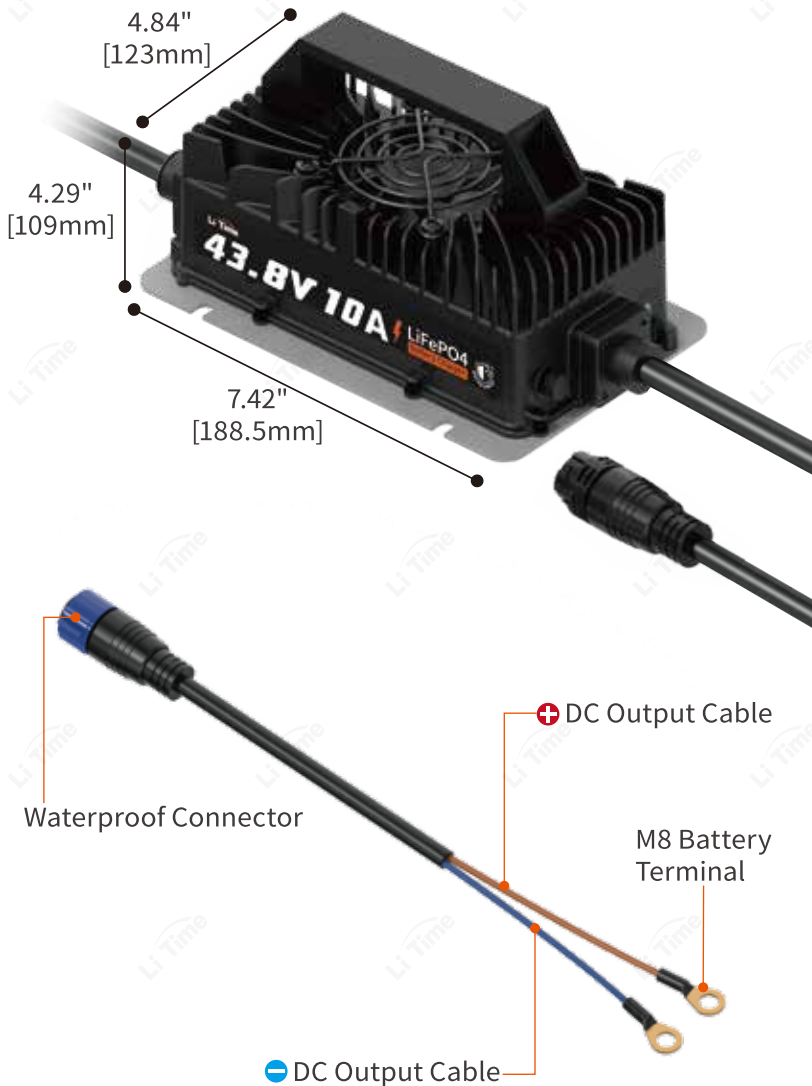


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PRODUCT OVERVIEW

43.8V 10A LIFEPO4 BATTERY CHARGER



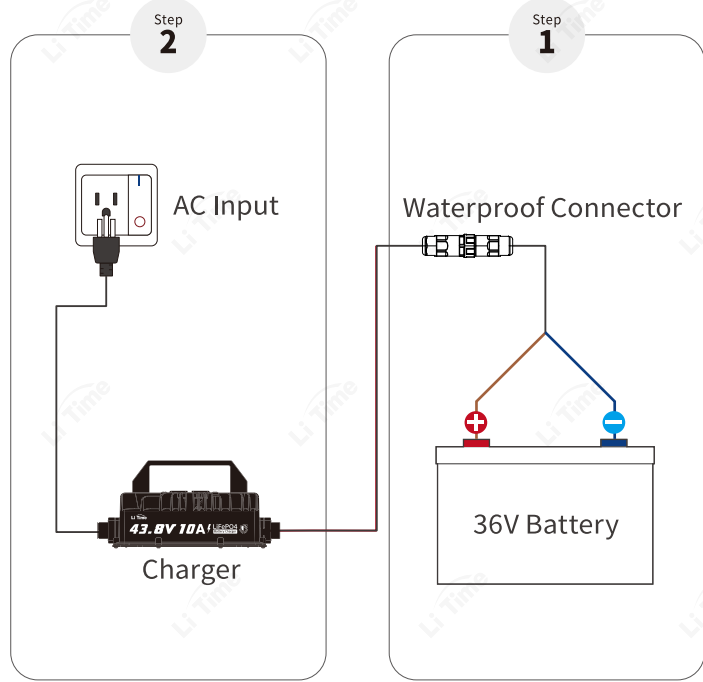
AC SIDE



DC SIDE



HOW TO CONNECT



- Step 1 Connect the M8 battery terminals of the charger to the battery, + to +, - to -.
- Step 2 Plug the AC plug to the grid power.
- Step 3 Disconnect the waterproof connector or the grid power after charging is complete.

LED INDICATOR

LED Status	Charging Status
Always on Red	Charging
Always on Green	Fully charged
Flashes Red	Under input over-voltage / under-voltage protection
Flashes Green	Standby
The indicator sequentially flashes in a red-green pattern, then repeats the cycle	Under short-circuit / output under-voltage protection
The indicator sequentially flashes in a red-red-green pattern, then repeats the cycle	Under reverse polarity connection protection
The indicator sequentially flashes in a red-red-stop pattern, then repeats the cycle	Under over-temperature protection
The indicator sequentially flashes in a red-red-red-stop pattern, then repeats the cycle	Under over-current protection
The indicator sequentially flashes in a red-red-red-stop pattern, then repeats the cycle	Under output over-voltage protection

REGISTER WARRANTY



Register Warranty

Li Time

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Shenzhen Litime Technology Co., Ltd
If you have any questions or need any help, please
contact us at service@litime.com.

SPECIFICATIONS

Input	90V to 260V AC, 47Hz to 63Hz
Max. Input Current(AC)	5.2A
Output Voltage(DC)	43.8V
Max. Output Power	430W
Output Current	10A
Protection Class	IP66
Temperature Range	Operating: -20°C to 65°C / -4°F to 149°F Storage: -40°C to 70°C / -40°F to 158°F
Dimensions	L7.42*W4.84*H4.29 inches L188.5*W123*H109 mm
Net Weight	Appr. 3.67 lbs / 1.8kg
Wire Specification	Input : 3*16AWG / 3*1.31mm ² Output: 2*12AWG / 2*3.5mm ²

Note: This battery charger supports activating the BMS of the lithium battery.

CHARGING MODES

Pre-Charge Stage (T1)

When the battery voltage is lower than its normal standard and cannot withstand high-current charging, the charger will charge it at a limited current.

This charging mode will be able to activate and repair the lithium battery and extend the lithium battery's lifetime. When the output voltage reaches the normal value, the charger will automatically switch to the next stage.

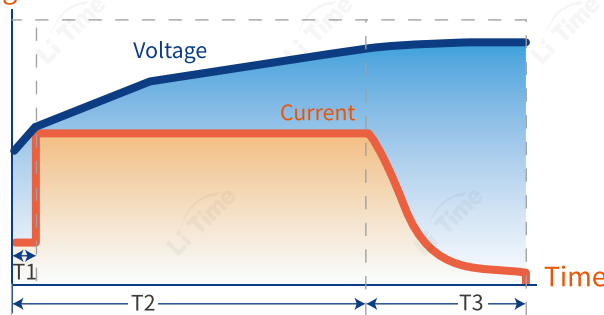
Constant Current Charging Stage (T2)

When the battery is in the main charging time, the charger will charge the battery with a 10A current for each bank. When the battery voltage rises above the set value, the charger will automatically switch to the next stage.

Constant Voltage Charging Stage (T3)

The charger switches to the Constant Voltage Charging Stage and the charging current gradually decreases. When the charging voltage or current reaches the set value, the charger automatically turns off the output voltage and the battery charging is completed.

Voltage & Current



* The charging curves are as above.

MAINTENANCE & USE PRECAUTIONS

- 1.Check the battery specifications carefully before charging to ensure that the battery matches the charger technical data.
- 2.Make sure the charger is properly connected to the battery (+ to +, - to -) to avoid a short circuit.
- 3.The input/output connectors must be firmly connected during charging.
- 4.Unplug the input/output cable of the charger immediately once the charger or battery is found to be abnormal or damaged during charging.
5. **Do not** use other input cables or extend the output connection cable personally, or please contact LiTime at service@litime.com to get some advice if you need it.
6. **Do not** open, dismantle, or modify the charger.
7. Never use it in a thunderstorm.
8. Please keep the charger and battery away from heat sources, sparks, flames, flammable gas, and hazardous chemicals.
9. **Do not** puncture, drop, crush, burn, penetrate, shake, strike, or throw it with force.
10. Place the charger in a well-ventilated area with sufficient heat dissipation to prevent overheating and damage.
11. Make sure the positive lug of the charger are not touching the negative lug before the charger connect to shore power.

TROUBLESHOOTING

If the charger does not work properly, the following methods can help you solve the general problem quickly. If you still cannot rule out the possibility of failure, please contact LiTime at service@litime.com.

LED Status/ Problem	Possible Cause	Optional Solutions
	Under Input Over-voltage / Under-voltage Protection	Make sure the input voltage is within 90 to 260 VAC.
	Under Over Temperature Protection	Cool down the charger to normal temperature, and the battery will resume charging.
	Under Short-Circuit Protection	Disconnect the connection of the battery and charger, then reconnect them correctly by + to +, - to -.
	Under Reverse Polarity Connection Protection	
	Under Over-current Protection	Unplug the charger AC plug from the grid power, then re-plug it.
	Under Output Over-voltage / Under-voltage Protection	Make sure the connected battery is a 38.4V LiFePO4 battery first. 1.Disconnect the connection of the battery and charger, then reconnect them correctly by + to +, - to -. 2.Unplug the charger AC plug from the grid power, then re-plug it.
The charger does not charge and the LED is off after being connected to grid power.	Poor Connection	Make sure all connections are correct and tight, and make sure the grid power is available.
	Charger Internal Damage	Contact us at service@litime.com for further solutions.