

14.6V/18.25V 20A



PRODUCT MANUAL

LiFePO4 Battery Charger

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PRODUCT OVERVIEW

14.6V/18.25V 20A LIFEPO4 BATTERY CHARGER

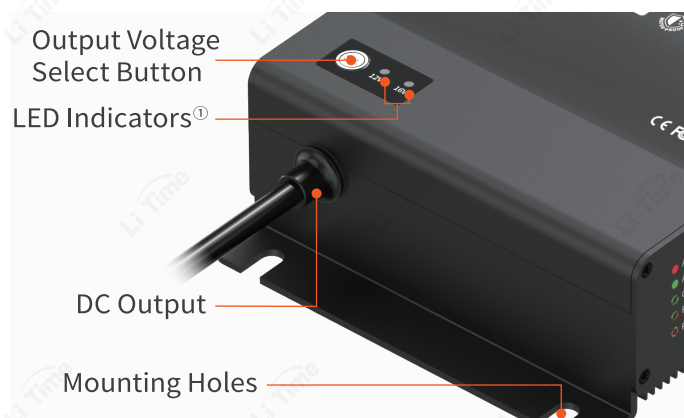


① The connector is waterproof when securely connected at both ends. When the waterproof connector is disconnected, cover it with the waterproof cap to maintain IP65 protection.

AC SIDE

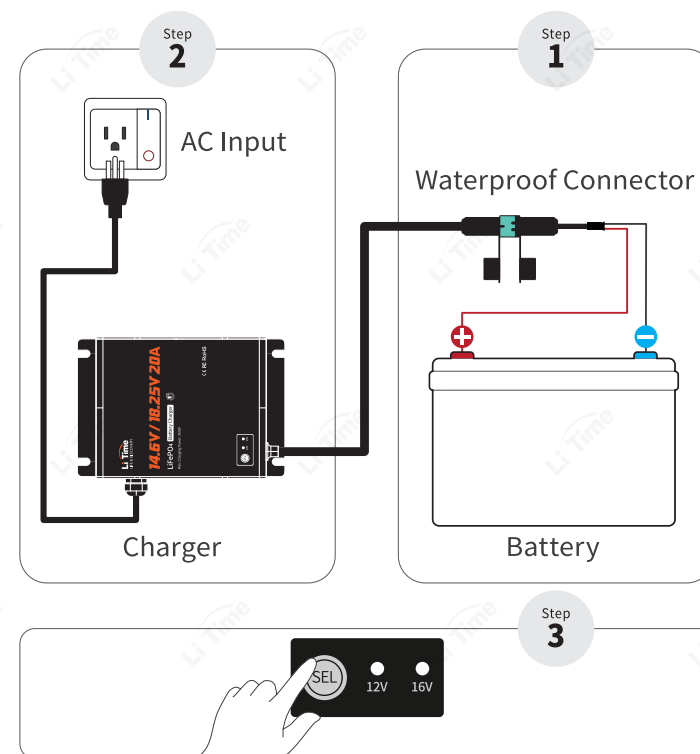


DC SIDE



① The 12V/16V LED indicator will light up based on the selected output voltage (14.6V/18.25V).

HOW TO CONNECT



- Step 1 Connect the DC output cable to the battery, + to +, - to -, then connect the waterproof connectors.
- Step 2 Plug the AC plug to the grid power.
- Step 3 Select the suitable output voltage by short pressing the button, then press and hold 3 seconds or wait for 60 seconds to save the voltage.
- Step 4 Disconnect the waterproof connector or the grid power after charging is complete.

BUTTON OPERATION

Button	Charging Status	Operation	Function
SEL	The charger is on set mode. (The LED is in red-green rapid flash.)	Short Press	Select the Output Voltage (14.6V or 18.25V)
		Press and Hold 3 Seconds (or wait for 60 seconds)	Save the Voltage and Enter Charging Mode
	The battery is charging. (The LED is always on red.)	Short Press	/
		Press and Hold 1 st Time	Manually Stop Charging
		Press and Hold 2 nd Time	Enter the Set Mode
		Press and Hold 3 rd Time	Save the Voltage and Resume Charging

LED INDICATOR

LED Status	Charge Status
Always on Red	Battery is charging.
Always on Green	Battery is fully charged.
Green Slow Flash	Charger is on standby.
Red-green Slow Flash	Charging is stopped manually.
Red-green Rapid Flash	The charger is in Set or Protection Mode ^① .

① The charger stops charging in protection status and resumes after exiting the protection status.

REGISTER WARRANTY



Register Warranty



If you have any questions or need any help, please contact us at service@litime.com.

CHARGING MODES

Pre-Charge (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 battery and extend the battery's lifetime. When the output voltage reaches the normal value, the charger will automatically switch to the next stage.

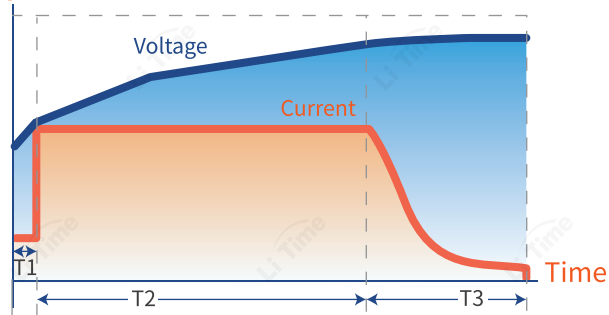
Constant Current Charging Stage (T2)

When the battery is in the main charging time, the charger will charge the battery with a 20A current. 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 LiFePO4 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** place rods or other metal objects in vents other openings.
10. Place the charger in a well-ventilated area with sufficient heat dissipation to prevent overheating and damage.
11. **Do not** puncture, drop, crush, burn, penetrate, shake, strike, or throw it with force.
12. **Do not** cover or touch the charger when charging, as the case will be hot during heat dissipation.

SPECIFICATIONS

Input Voltage	100V to 240V AC; 47Hz to 63Hz
Input Current	5A/115V AC, 2.5A/230V AC
Output Voltage	14.6V DC/ 18.25V DC
Output Current	20A
Output Power	292W/14.6V DC, 365W/18.25V DC
Protection Class	IP65
Temperature Range	Operating: -20°C to 40°C / -4°F to 104°F Storage: -40°C to 70°C / -40°F to 158°F
Dimensions	L9.08*W6.18*H2.64 inches L230.6*W157*H67 mm
Net Weight	Appr. 4.41lbs / 2kg

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.

Problem	Possible Cause	Optional Solutions
The charger is not charging the battery after being connected to grid power.	Poor connection with battery	Make sure connections are correct and tight.
The battery is not fully charged after a long time charging.	Batteries are aged or damaged	Replace a new battery.
	Improper output voltage selection	Set the correct output voltage (14.6V/18.25V).
	Over temperature	Disconnect the battery to the charger, and cool the charger to normal temperature.
	Over current / Under voltage	Restart the charger.
	Over voltage	①Make sure the connected battery is a 12.8V/16V LiFePO4 battery; ②Set the correct output voltage (14.6V/18.25V).
Enter set mode after automatic restart, red and green lights flash rapidly alternately.	Reverse connection	Connect the battery with the charger correctly (⊕ to ⊕, ⊖ to ⊖) and retry.
	Short circuit	Make sure the positive lugs of the charger are not touching the negative lugs.