

LiFePO₄

Rechargeable Battery

**12.8V 314AH
(4019.2WH)**

01 Features



Overcharge
Protection



Over Discharge
Protection



Overcurrent
Protection



Balance
Function



Short Circuit
Protection



Overvoltage
Protection



Temperature
Protection



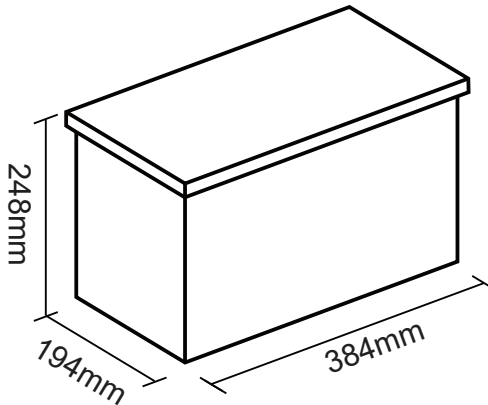
Environmental
Friendly

02 Specification

Electrical Characteristics	Rated Voltage	12.8V
	Rated Capacity	314Ah
	Usable Capacity	308Ah
	Energy	4019.2Wh
	Internal Resistance(AC)	≤15mΩ
	Cycle Life	≥4000 times
	Months Self Discharge	< 3%
	Efficiency of Charge	100% @0.5C
	Efficiency of Discharge	90%-100% @1C
Standard Charge	Charge Voltage	14.6V
	Charge Mode	CC/CV
	Recommend Charge Current	60A
	Max. Charge Current	200A
	Charge Cut-off Voltage	14.6V
Standard Discharge	Max. Discharge Current	200A
	Discharge Cut-off Voltage	10V
Environmental	Charge Temperature	32°F to 122°F / 0°C to 50°C
	Discharge Temperature	-4°F to 140°F / -20°C to 60°C
	Storage Temperature	14°F to 122°F / -10°C to 50°C
Mechanical	Plastic Case	ABS
	Dimensions	L384*W194*H248mm
	Weight	25.08kg
	Terminal	M8
	Communication	/

03 Sizes

Pack Battery



Terminal

Terminal Size: M8

04 Advantage

- With battery management system enclosed, need no extra wiring.
- Built with LiFePO4 battery cells that are engineered to deliver superior performance & longevity.
- Battery voltage stays above 12.5V at 90% discharged.
- Maintenance free; Non spill.
- Perfect replacement or upgrade for a traditional lead-acid battery.

05 Warranty Policy

We provide a two-years warranty for all batteries. Our two years battery warranty includes the following privileges, if used correctly according to the manual :

- We will assist in analyzing the customer's problem within 24 hours, help solve the problem, restore battery usage, and introduce the best use method.
- If the problem cannot be resolved, we will send a new battery to replace the defective battery. And the defective battery needs to be returned to our warehouse, will be inspected and tested by our technical team.

06 Charging Tips

★ About Charging Voltage:

Based on the characteristics of Lithium Phosphate (LiFePO₄) batteries, all LiFePO₄ batteries have violent internal chemical reactions during the charging process, the lithium ions are very active, and the battery voltage is relatively high.

After charging and disconnecting the battery from the power source, the chemical reactions inside the battery slow down and the battery's voltage gradually decreases and stabilizes.

If you need to test the accurate and stable voltage of the battery, please test its voltage after leaving the battery for more than 120 minutes after disconnecting the power supply.

★ Two Necessary Steps Before Connecting:

These two steps are necessary in order to reduce the voltage difference between batteries, and through these, the battery system can perform the best of it in series or/and in parallel.

Step1.

Fully charge your batteries separately.

Step2.

Connect your batteries one by one in parallel, and leave them together for 12~24hrs. And then, you can connect your batteries in series or/and in parallel.

07 ABOUT OUR BATTERY'S BMS

The unique built-in battery management system (BMS) of our product's lithium battery can protect it from overcharge, deep discharge, overload, overheating and short circuit, and low self-discharge rate.

Our BMS has a high temperature disconnect function. when the internal temperature of the battery reaches 75°C(167°F), It will automatically disconnect to protect the battery.

With overcharge and overdischarge protection functions, when the overcharge voltage exceeds 15V or the overdischarge voltage is lower than 8.8V, the battery will automatically disconnect.

Our recommended charging voltage and discharging voltage are 14.4±0.2V and 10V±0.2V respectively.

NOTE!

HOW TO ACTIVATE THE BATTERY WHEN BMS CUT IT OFF FOR PROTECTION?

If the BMS has cut-off the battery for protection you need to cut off the load of the battery and put the battery aside for 30mins. Then the battery will automatically recover itself to normal voltage and can be used after fully charged.

If the battery is unable to recover itself and its voltage is too low to hold a charge, you can activate it in below two ways:

- ① Use the charger with 0V charging function (it can charge the battery starting from 0V) to charge the battery. After fully charged, the battery can be used normally.
- ② Connect an 18V~36V solar panel to charge the battery for 3~10s in sunny daytime.

DANGER!

- ! Do not immerse the battery in water or allow it to get wet.
- ! Do not use or store the battery near sources of heat such as a fire or heater.
- ! Do not use any chargers other than those recommended by manufacturer.
- ! Do not reverse the positive(+) and negative(-) terminals.
- ! Do not connect the battery directly to wall outlets or car cigarette-lighter sock ets.
- ! Do not put the battery into a fire or apply direct heat to it.
- ! Do not short-circuit the battery by connecting wires or other metal objects to the positive(+) and negative(-) terminals.
- ! Do not pierce the battery casing with a nail or other sharp object, break it open with a hammer, or step on it.
- ! Do not strike, throw or subject the battery to sever physical shock.
- ! Do not directly solder the battery terminals.
- ! Do not attempt to disassemble or modify the battery in any way.
- ! Do not place the battery in a microwave oven or pressurized container.
- ! Do not use the battery in combination with primary batteries(such as dry-cell batteries) or batteries of different capacity, type or brand.
- ! Do not use the battery if it gives off an odor, generates heat, becomes discolored or deformed, or appears abnormal in any way. If the battery is in use or being recharged, remove it from the device or charger immediately and discontinue use.

FC CE   **RoHS**
MADE IN CHINA

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.