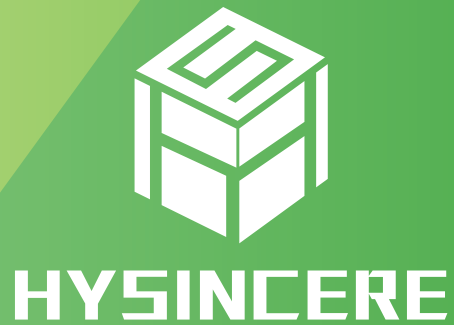


LiFePO₄

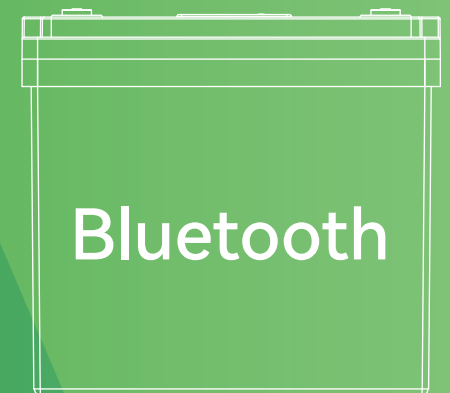
Lithium Iron Phosphate Battery



PRODUCT MANUAL

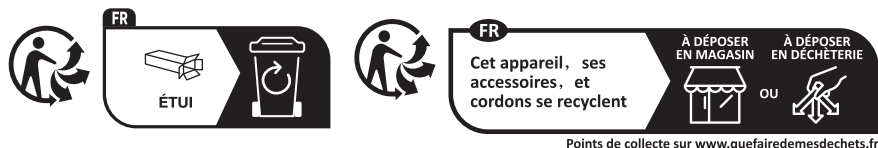
Lithium Iron Phosphate
(LiFePO₄) Battery

12.8V
100Ah
1280Wh



Contents

English 01-08



MADE IN CHINA

APP INTRODUCTION

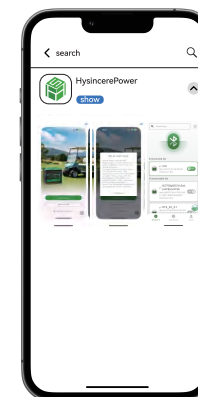
EN

Step 1

This application is developed and designed by HysincerePower®. It specializes in monitoring lithium batteries, providing real-time status readings such as the voltage, charging and discharging current, alarm prompts, protection status, etc. This allows users to clearly understand the status of lithium batteries and ensure safe use.

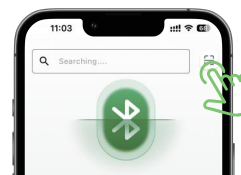


You can search "HysincerePower" in the Apple or Google Play Store to download and install.

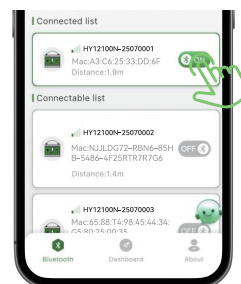
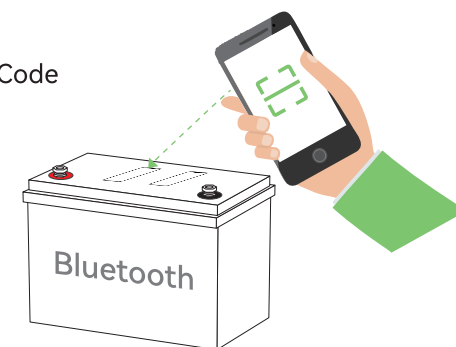


Step 2

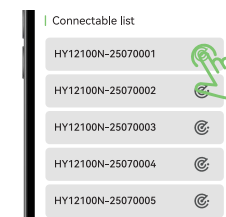
Pair the battery with the HysincerePower APP and effortlessly keep track of the battery's real-time status.



Scan QR Code



Search Device



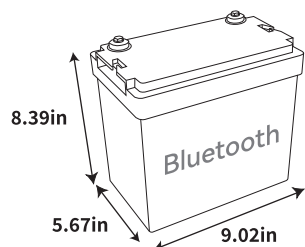
PRODUCT OVERVIEW

Battery

Combination: 12.8V100Ah

Dimension: L22.9*W14.4*H21.3 cm

Weight: 8.95Kg

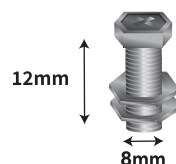


Terminal & post bolts

Terminal Size: M8 * 1mm Metric Thread

Post Bolts: M8 * 1mm Metric Thread * 12mm Bolt Length

(The bolts can be replaced with M8 bolts of other lengths based on actual needs.)



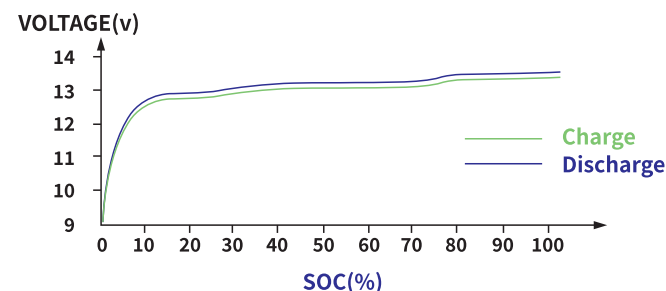
Item	Parameter
Cell	LifePO4 Battery
Nominal Voltage	12.8V
Nominal Capacity	100Ah
Usable capacity	100Ah
Energy	1280Wh
Max. Output Power Rate	1280W
Battery Management System (BMS) Board	100A
Max.Continuous Charge Current/Discharge current	100A
Charge Voltage	14.6V
Cycle life	4000 Times
Recommend Charging Current	20A (Within 0.2C)
Max. Discharge Current 5 Seconds	200A(5s), 500A(1s)
Dimension	L22.9*W14.4*H21.3 cm
Weight	8.95kg
Battery Pack Case	ABS
Temperature Range	Charge: 0°C—55°C Discharge: -20°C—60°C Storage: 0°C ~40°C (the best storage temperature is 15°C ~25°C, dry storage)
Low Temperature Charging Protection	Yes
Terminal & Post Bolts Information	
Terminal Size	M8 * 1mm Metric Thread
Post Bolts	M8 * 1mm Metric Thread * 12mm Bolt Length

THE BATTERY CAPACITY

State of charge (soc)

The battery capacity could be roughly estimated by its rest voltage (not charging/discharging voltage). As there are subtle differences in the voltage of each battery, the below parameters are for reference only.

Rest Voltage: The voltage needs to be tested at rest (with zero current) after 30 mins of disconnecting from the charger & loads.

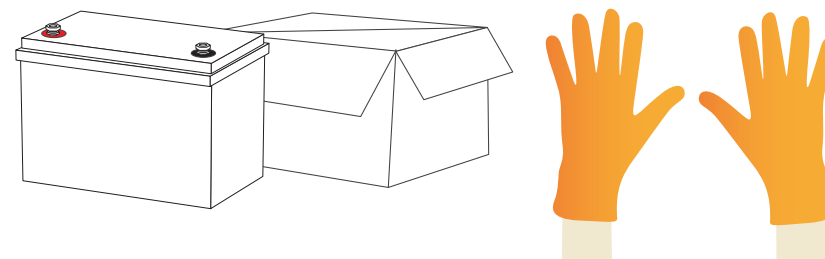


Voltage-Capacity Cheat Sheet				
12.8V System	25.6V System	48V/51.2V System		
14.6V	29.2V	58.4V	100%	Charging Resting
13.6V	27.2V	54.4V	100%	
13.4V	26.8V	53.6V	99%	
13.3V	26.6V	53.2V	90%	
13.2V	26.4V	52.8V	70%	
13.1V	26.2V	52.4V	40%	
13.0V	26.0V	52.0V	30%	
12.9V	25.8V	51.6V	20%	
12.8V	25.6V	51.2V	17%	
12.5V	25.0V	50.0V	14%	
12.0V	24.0V	48.0V	9%	
10.0V	20.0V	40.0V	0%	

HOW TO CONNECT BATTERIES

Step 1 Wear Insulating Gloves

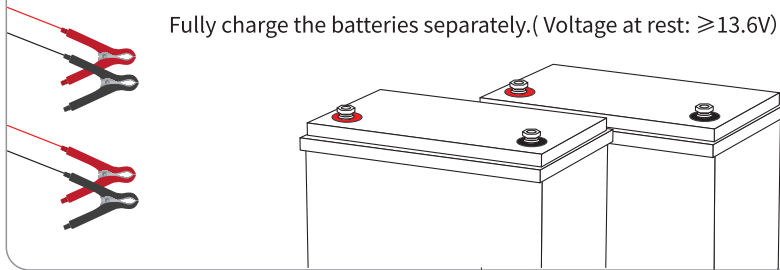
Wear insulating gloves before connecting. Please pay attention to operation safety in the process of connection.



Step 2 Voltage Balancing Before Connection

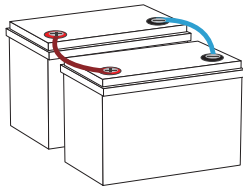
Below two steps are necessary to reduce the voltage difference between batteries and let the battery system perform the best of it in series or/ parallel.

➤ Step ①



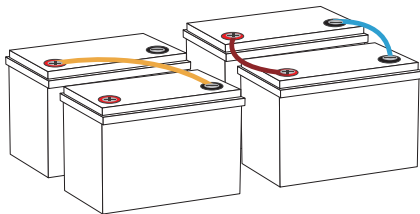
➤ Step ②

Connect the batteries one by one in parallel, and leave them together for 12~24 hrs.



➤ Step ③

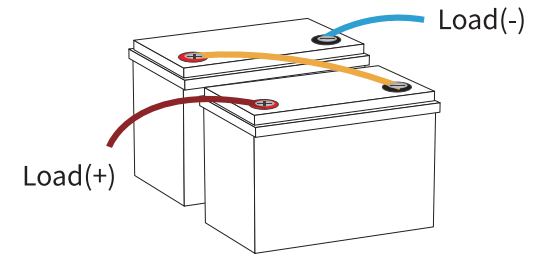
They can then be connected in series or parallel.



Step 3 Battery - to - Battery Connection

#1 Connctet Batteries in Series

+ to **-**

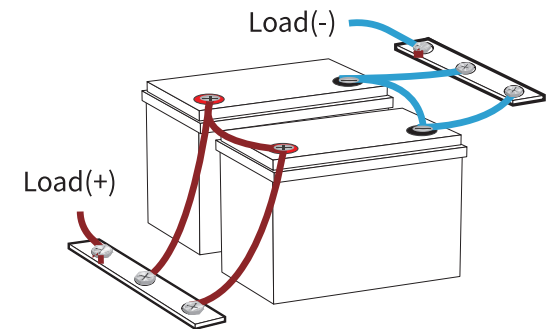


After series connection, the voltage of the battery system will be doubled according to the number of batteries you connctet.

#2 Connect Batteries in Parallel

+ to **+**

- to **-**



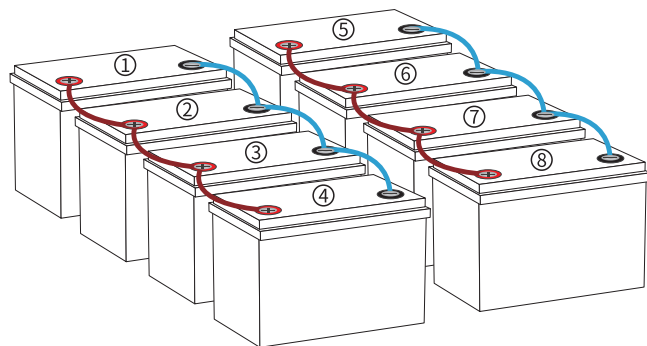
After parallel connection, the capacity of the battery system will be doubled according to the number of batteries you connctet.

#3 Connect Batteries Both in Series & Parallel

Optimal Connection Method Recommendation

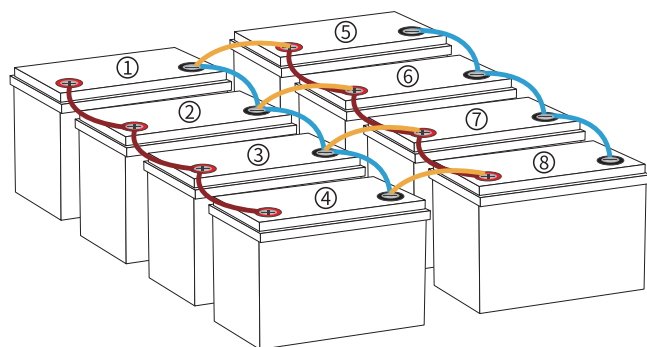
➤ Step ①

Connect the batteries in parallel.



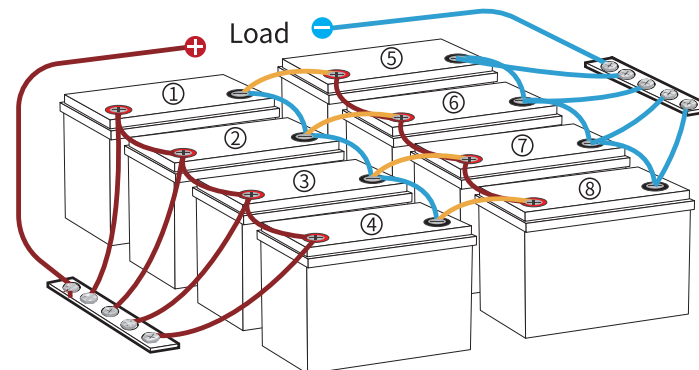
➤ Step ②

Connect the paralleled battery systems in series.



➤ Step ③

Connect the positive $+$ of battery ①/②/③/④ to a copper bar and the $+$ of the load to the same copper bar. And then connect the negative $-$ of ⑤/⑥/⑦/⑧ to another copper bar and the $-$ of the load to the same copper bar.



4P2S 24V (25.6V) 400Ah Battery System

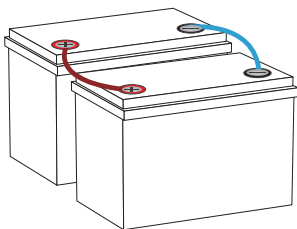
As $-$ of ①/②/③/④ is connected in series with $+$ of ⑤/⑥/⑦/⑧, please do not connect $-$ of ①/②/③/④ with $-$ of load or $+$ of ⑤/⑥/⑦/⑧ with $+$ of load, otherwise the battery system will fail to connect in series.

- ① A battery system with both series and parallel connections can be achieved only when the number of batteries is ≥ 4 and even.
- ② To connect as in Step ③ is recommended to ensure that the input & output currents of each battery are balanced to achieve a more stable battery system with greater performance.

It is not recommended to use one cable to connect the $+$ or $-$ of the battery system and the load. If the total output or input current of the battery system is too large, the connected single cable may heat up or even melt.

- ③ Please do not connect in reverse order, which may affect the use of the batteries.

Rebalancing Every 6 Months



It is recommended to rebalance the battery voltage every six months following Step 2 on Page 3 if you're connecting multiple batteries as a battery system, as there might be voltage differences after six months of the battery system running

ATTENTION

CAUTION: RISK OF FIRE, EXPLOSION OR BURNS

DO NOT Short circuit

DO NOT Heat above 70°C

DO NOT Reverse connections from charger to battery

DO NOT Disassemble

DO NOT Throw into fire or incinerate

WARNING

BATTERY DISPOSAL

The electrodes of the waste battery should be wrapped with insulating paper to prevent fire and explosion.

PROHIBITION OF DISASSEMBLY

Never disassemble the cells.

The disassembling may generate an internal short circuit in the cell, which may cause gassing, firing, explosion, or other problems.

THE ELECTROLYTE IS HARMFUL

Li-Fe battery should not have liquid from electrolyte flowing, but in case the electrolyte comes into contact with the skin, or eyes, physicians shall slush the electrolyte immediately with fresh water and medical advice is to be sought.

PROHIBITION OF DUMPING OF CELLS INTO WATER

Do not soak the battery in which the liquid, like water, seawater and non-alcoholic drinks, fruit juice, coffee or other drinks.

PROHIBITION OF USE OF DAMAGED CELLS

If any abnormal features of the cells are found such as damages in a plastic envelope of the cell, deformation of the cell package, smelling of an electrolyte, an electrolyte leakage and others, the cells shall never be used anymore.

The cells with a smell of the electrolyte or a leakage shall be placed away from the fire to avoid firing or explosion.

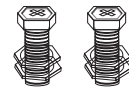
PROHIBITION OF USING IN BELOW PLACES

Do not use the battery in a place with strong static electricity and a strong magnetic field, otherwise, it is easy to damage the battery safety protection device and bring hidden danger

PACKING LIST



1* 12.8V100Ah



2* M8 bolts



2* Insulating Caps



1* Product Manual

FCC STATEMENT

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- 1) This device may not cause interference.
- 2) This device must accept any interference, including interference that may cause undesired operation of the device.

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 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.

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

FCC Radiation Exposure Statement

This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This device must operate with a minimum distance of 20 cm between the radiator and user body.