HeroEE L12314

(HeroEE L12314 User Manual)

（版本V1.0）

Contact Us:

https://www.hero-ee.com

Respected user:

Thank you for using Shenzhen Hithium Hero Energy Equity Energy Storage Battery. In order to facilitate the correct operation of this product, please read this manual carefully before use.Please be sure to read Chapter 1 "Safety Notes "carefully.

1.Safety notes

⚠ Warning!

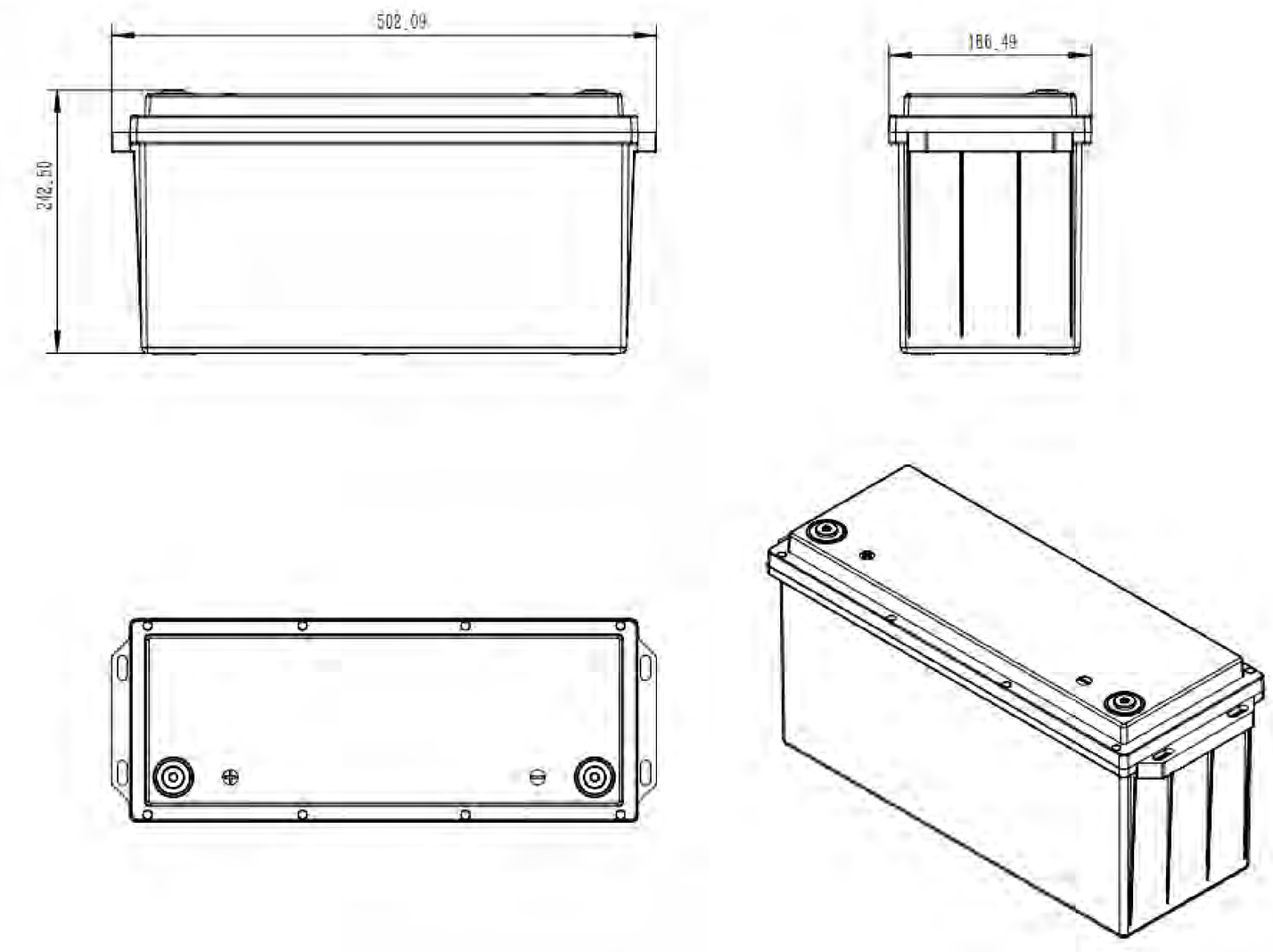
In order to prevent accidents such as leakage, heat generation, fire, explosion,and performance degradation of lithium batteries, please use the batteries normally according to the following specifications. We are not responsible for accidents caused by failure to follow the specifications;

1. Do not immerse the battery in water or other liquids, pay attention to moisture;
2. Should avoid the battery positive and negative end short circuit;
3. Please charge or discharge according to the charging or discharging environment temperature；
4. It is prohibited to disassemble the battery, disassembling the battery may cause internal short circuit, which may lead to decomposition of internal substances,fire and explosion. In addition, disassembling the battery may make the battery electrolyte leakage, and the electrolyte inside the battery will cause damage to the human body; if the electrolyte splashes on the skin, eyes or ther parts of the body, please flush with water immediately, and go to the hospital for treatment immediately;
5. Do not dispose of the discarded batteries by fire, as this may result in explosion and other dangerous accidents;
6. If the battery is damaged, the battery is deformed, the electrolyte is leaking or you smell the electrolyte and other abnormal phenomena, do not use the battery any more and send it to the authorized office of the manufacturer or the relevant organization for proper disposal. In addition, the battery leaking electrolyte should be kept away from fire source to avoid causing explosion;
7. Users are not allowed to dismantle the battery cover privately and are strictly prohibited to open it, otherwise, our company will not be responsible for it.

1. Product Specification

1.1 Size

Size： L×W×H(mm)： L502*W186*H243mm



1.2 Technical parameters

Model No.	HeroEE L12314
Battery Chemistry	Lithium-iron phosphate (LiFePO4)
Battery Capacity [kWh]	4019.20Wh (with built-in Hithium 314 Ah battery cell -4S1P)
Battery Cell Lifespan	11000 cycles@(25℃ , 100%DOD , 0.5P , @70%EOL)
Interal Impedance	≤10mΩ
Nominal Voltage（V）	12.80V
Charge Voltage Range [VDC]	10.80~14.60[VDC]
Recommend Charge Current	60A（0.2C）
Max Charge / Discharge Current[A]	150A
Charge Method	CC/CV
Recommend Operating Temperature [°C]	Normal- Charge：-20°C ~ 55°C Normal-Discharge：0°C ~ 55°C
Recommend Storage Temperature [°C]	-5°C to 35°C
Humidity [%]	10%~90%
Weight [kg]	≈29.25KG
Dimension [mm]	L502*W186*H243mm
IP Rating	IP67
Certification	UN38.3，MSDS

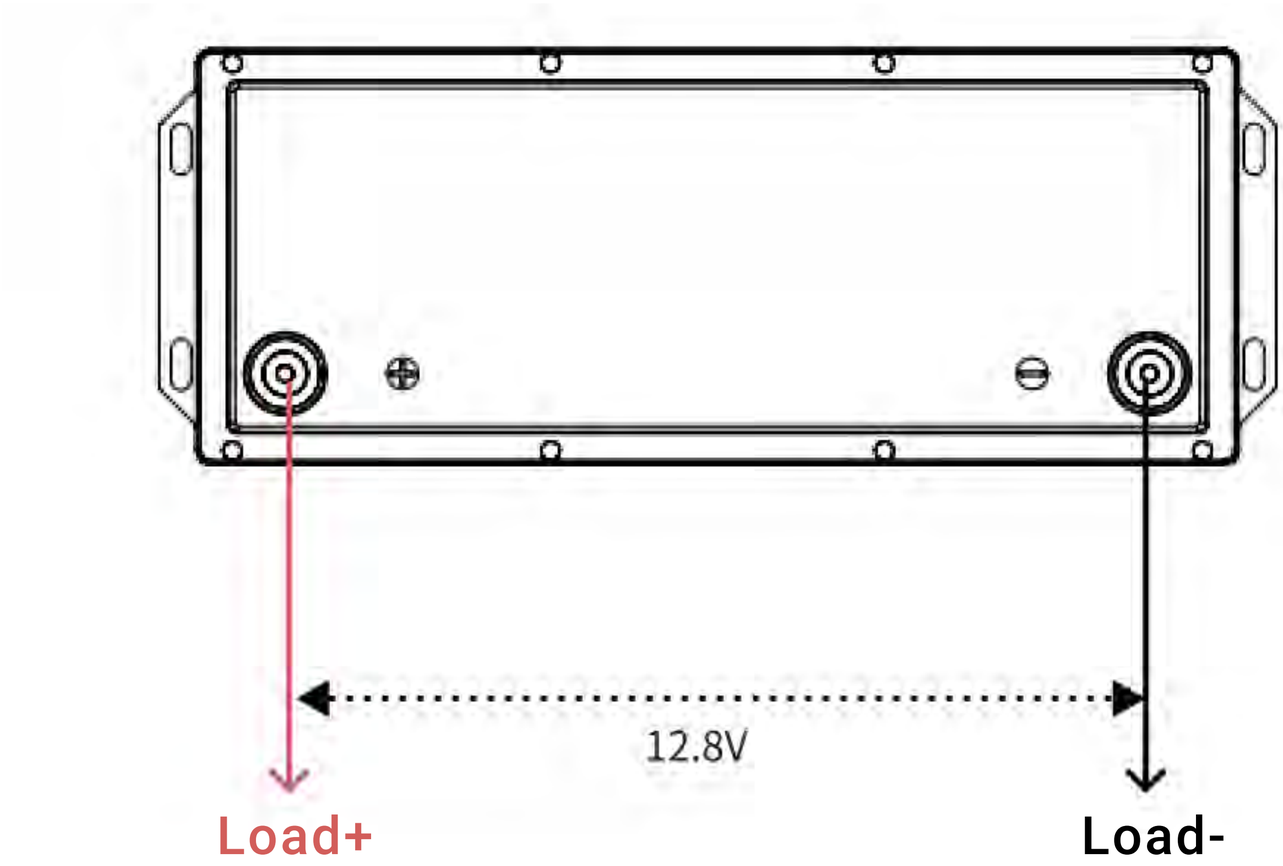
Note : Shenzhen Hithium Hero Energy Equity reserves the right to amend this datasheet due to design changes. Please kindly refer the latest version of the datasheet.

2. List of attachments

Items	Number
Battery pack	1
Bolt	2
User manual	1
Certificate of conformity	1

3. Usage Method

3.1 Single battery use （Voltage rating 12.8V）



3.2 Series/Parallel Connection

⚠ Warning!

To connect in series or/and parallel,batteries should meet the below conditions:

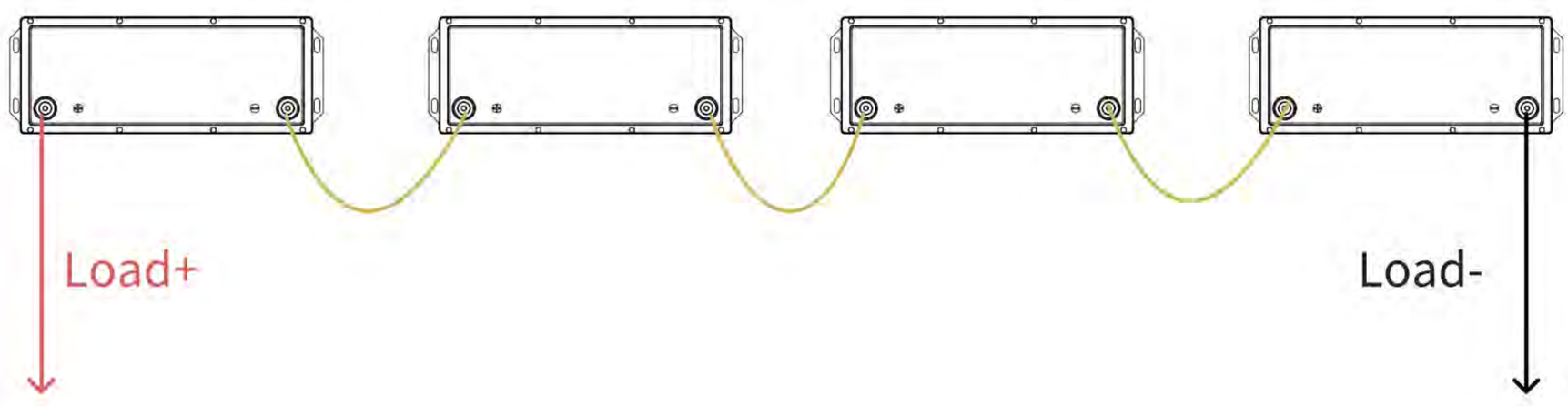
1. Batteries must be the same type of product；
2. The batteries max number of series is 4；
3. Before the battery is used in series or parallel, please make sure each battery capacity is 100%, the voltage difference is controlled within 0.2V.
4. When battery is used in series, the max current of charging and discharging is 150A.
5. Battery-to-Battery connection cable:1*2AWG copper cable.
6. Total input & output connection: adding two copper bars except for the cables.

3.2.1 Batteries used in series (+ to -)

After series connection, the voltage of the battery system will double according to the number of batteries you connected.
E.g.If four 12.8V314Ah batteries are connected in series, the battery system will be 51.2V314Ah.

⚠ Warning!

Note: The cable gauge used in this step should be able to support the total input & output current of the entire battery system.

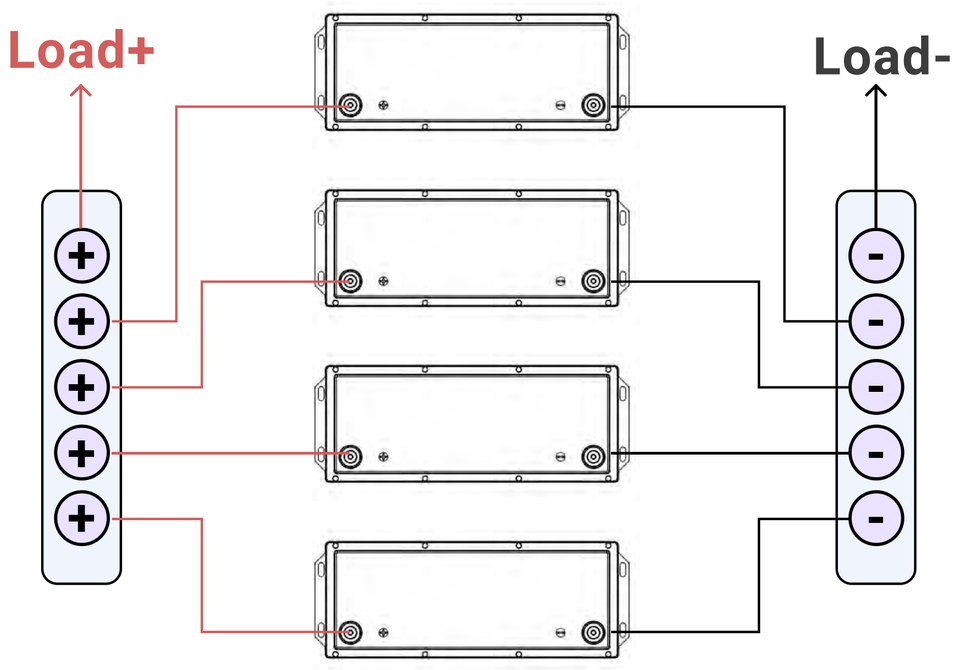


3.3 Batteries are used in parallel(+to+ -to-)

After parallel connection, the capacity of the battery system will be doubled according to the number of batteries you connect.
E.g If four 12.8V314Ah batteries are connected in parallel, the battery system will be 12.8V(12V)1256Ah.

⚠ Warning!

Note: The cable gauge used in this step should be able to support the total input & output current of the entire battery system.

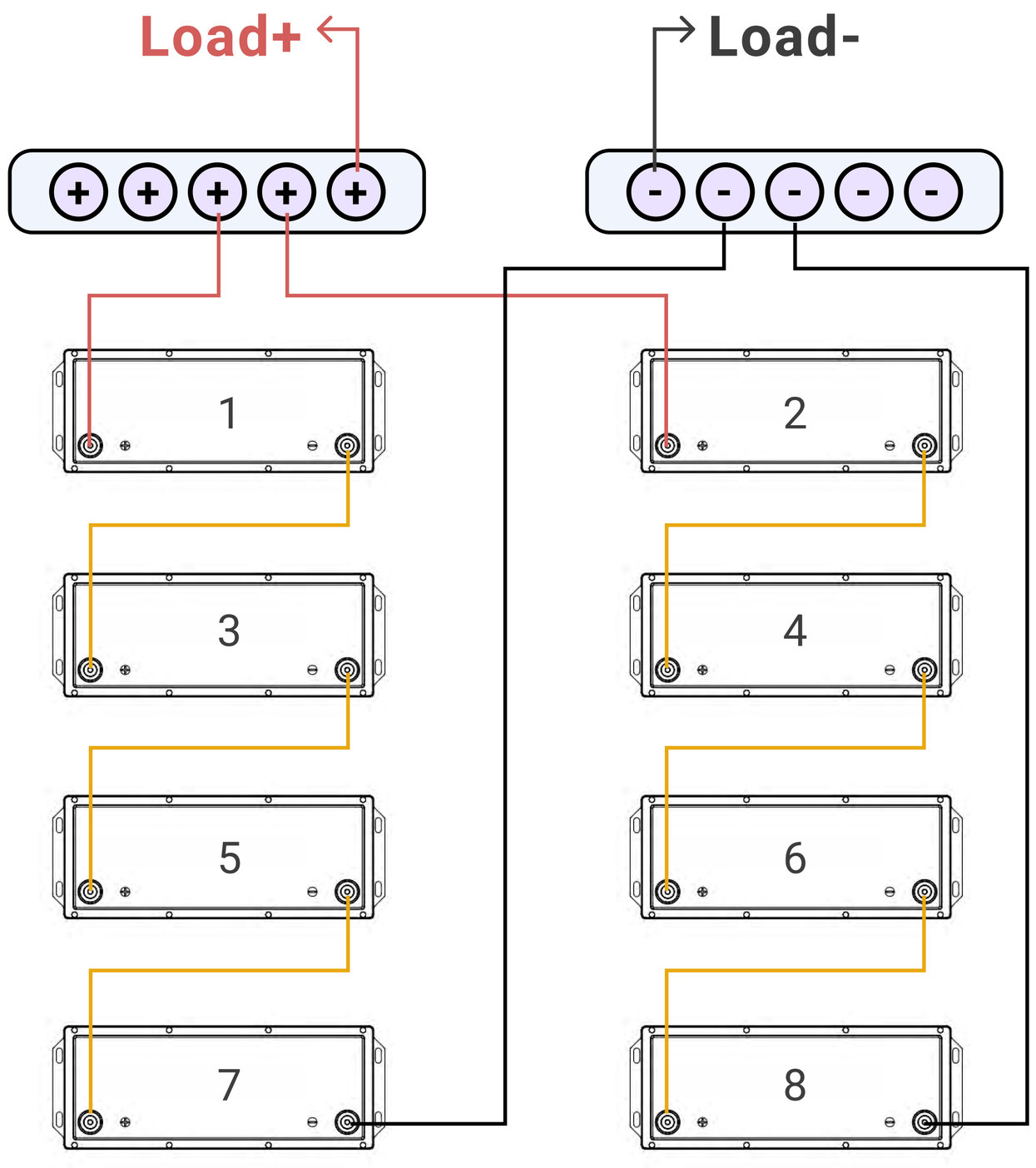


3.4 Batteries are used in series and parallel

First connect the batteries in series parallel.Second connect the paralleled battery systems in parallel.Connect the positive of battery ①②to a copper bar and the positive of the load to the same copper bar.And then connect the negative of⑦⑧to another copper bar and the negative of the load to the same copper bar.

⚠ Warning!

Note: The cable gauge used in this step should be able to support the total input & output current of the entire battery system.



4. Inverter Setting

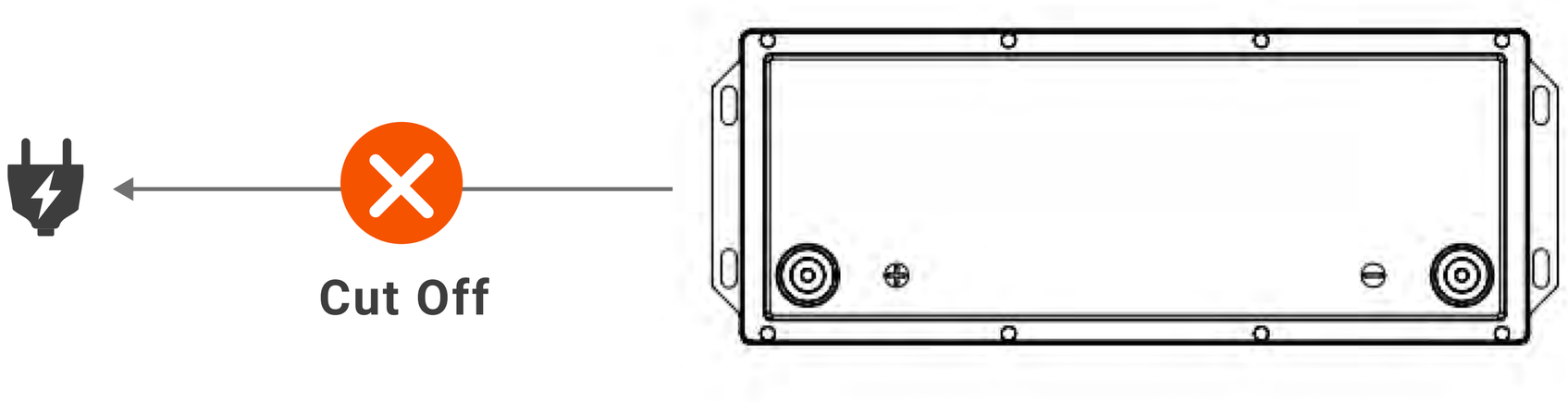
1. Method One（Recommend）
   Select“12.8V $LiFePO_4$ Mode”
2. Method Two
   If method one is not available,select "User Mode" to enter values according to below parameters.

Charging	Charging Voltage	14.6V
	Over Voltage Disconnect	14.8V
	Over Voltage Reconnect	14.2V
Discharging	Under Voltage Warning	11.6V
	Under Voltage Recover	12V
	Low Voltage Disconnect	10.8V
	Low Voltage Reconnect	11.2V

5. Common problem analysis and solutions

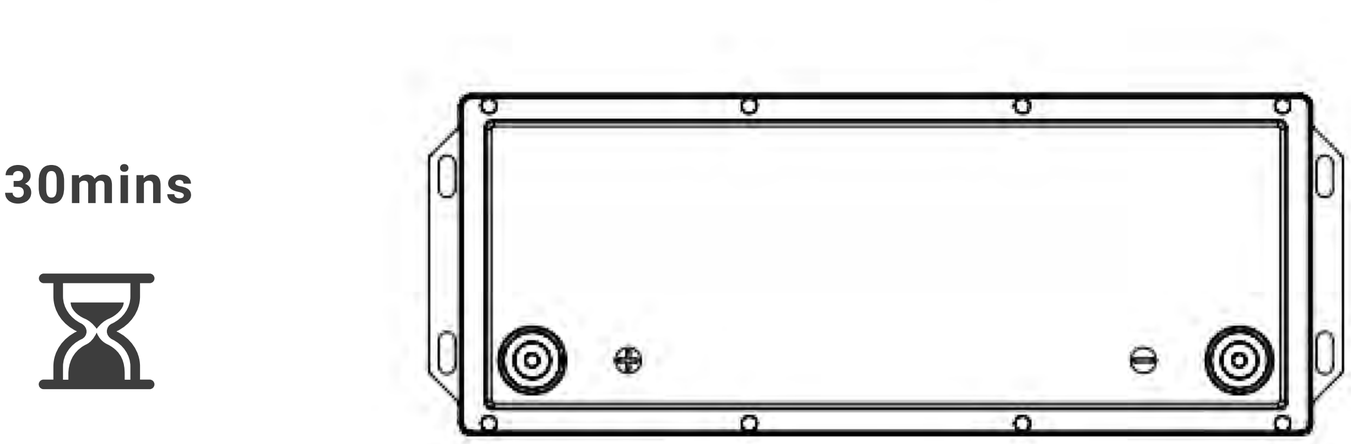
When the battery can't work or can't be charged or voltage ＜ 9v, maybe the BMS has shut it off for protection.You could try the below way to activate the battery.

Step 1: Cut off all the connections from the battery.



Step 2: Leave the battery aside for 30 mins

Then the battery will automatically recover itself to normal voltage and can be used after fully charged.



6. Storage

Battery storage in the ambient temperature -5 ℃ ~ 35 ℃ , relative humidity less than 75% of the clean, dry, ventilated indoor, avoid contact with corrosive liquids, away from sources of ignition and heat; the battery maintains about 50% ~ 60% of the state of power; In order to prevent the battery from over-discharging the battery in the storage period of about 90 days charging once.

7. Maintenance and upkeep

1. For the first time, the battery can reach its maximum capacity after 3-5 times of use;
2. The battery should be used in an air-circulated, dry environment, avoiding proximity to sources of ignition;
3. The best working environment temperature of the battery 15℃~ 35℃ , outside of this temperature range will affect the normal operation of the battery;
4. Cannot short-circuit the positive and negative terminals of the battery to avoid danger;
5. Can not use organic solvents to clean the battery shell; if an accident occurs, use carbon dioxide fire extinguishers, use carbon tetrachloride, sand and other fire extinguishing equipment;
6. Battery failure, please send it to the manufacturer's authorized office or the relevant agencies to properly handle, please do not discard to avoid danger.

8. Precautions During Transportation

1. Batteries are adapted to automobiles, trains, airplanes and other modes of transportation, and should avoid sunshine, rain and violent vibration duringtransportation;
2. Batteries must be insulated with shockproof material and marked with a label with fragile words to avoid damage to the batteries caused by bumps on the way;
3. It should be upward and marked with a good upward labeling, do not put it upside down, nor can it be placed at random;
4. Batteries in the transportation loading and unloading process must be gently held and placed, do not collide at random;
5. Do not press heavy objects on the battery for transportation, to avoid extrusion causing damage to the battery;
6. Do not mix with flammable, explosive, and sharp metal objects for transportation;
7. There should be moisture-proof, water-proof and fire-proof labels on the packages to avoid danger due to transportation.

HTHIUM Warranty card

User Info

Name:	Tel:
Email:	Zip Code:
Address:	

Product Info

Mode:	Series No:
Purchase date:	Problem Description:

Seller information

Company name:	Tel:

HTHIUM | HeroEE

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