※ **Thanks for selecting the EPEVER LiFePO4 battery; please read this manual carefully before using the product.**
※ **Do not use the product in flammable, explosive, dust accumulative, or other severe environments.**
※ **Please reserve this manual for future review.**

LiFePO4 (LFP) Battery

LFP3.07KWH25.6V-P65L2

1. Important Safety Instructions

Work and storage precautions:

a) Please store the battery in a cool and dry place. Keep the battery away from corrosive, explosive, and insulating gases or conductive dust, as well as away from sources of fire, heat, and high voltage. It is forbidden to immerse the battery in water and keep children out of reach of the battery. No static electricity exists (static electricity can easily damage the battery protection circuit and cause battery damage).

b) Fix the battery securely in a reasonable environment, and connect the connector reliably to avoid arcs and sparks caused by the contact friction.

c) Handle the battery gently to avoid vibration, collision, and pressure shock. Otherwise, it may cause battery short circuit, resulting in high temperature and fire.

d) Do not short-circuit the battery, and do not disassemble the battery to avoid danger.

e) Please keep the battery in a half-charge state (40%~80% SOC is preferred). Please use non-conductive materials to wrap the battery to avoid direct contact with metal, which may cause damage to the battery.

f) Dispose of discarded batteries safely and not put them in fire or liquid.

Hazard warning:

a) It is strictly forbidden to crush, drop, collide, puncture, burn, or other destructive acts on the battery.

b) Do not disassemble the battery. Improper disassembly may damage the battery's protection function, causing battery deformation, heating, smoking, or burning.

c) Do not short-circuit the battery. Connecting the battery's positive and negative poles with conductive materials, storing and transporting the battery together with conductive materials are prohibited.

d) Do not heat or burn batteries. Otherwise, it will cause the melting of battery components, loss of safety functions, or electrolyte combustion. Overheating can deform the battery, heat, smoke, or burn.

Emergency treatments:

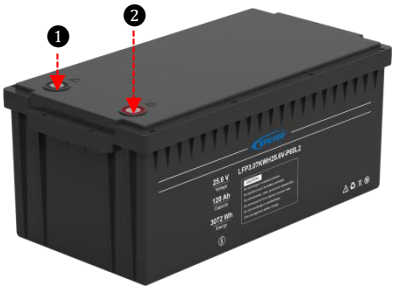
a) Avoid skin and eye contact with the electrolyte when it leaks. In case of contact, immediately wash with plenty of water and seek help from a doctor. It is forbidden for any person or animal to swallow any part of the battery or the substances contained in the battery.

b) If the battery is severely deformed or electrolyte leakage occurs, the battery should be placed in an explosion-proof box or open space when conditions permit; personnel should evacuate quickly.

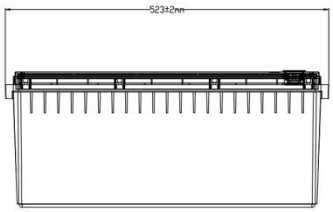
c) If the battery catches fire during use or storage, use a high-pressure water gun to extinguish the fire while ensuring personal safety.

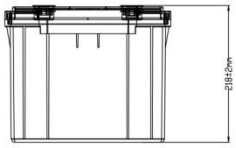
d) If the battery catches fire during the charging process, turn off the charger power first and then take the next step to extinguish the fire.

2. Appearance



❶ **Lithium battery negative terminal** ❷ **Lithium battery positive terminal**





3. Charging Operation

1. General Checking.
   - Check thoroughly including all the cables for showing no damages.
   - Make sure the mains supply complies with the specification of the charger and the battery.
2. Turn off the charger and connect it to the battery.

WARNING: Check the battery polarity before connecting to the charger. It is forbidden to reverse connect the battery.

3. Connect the charger to mains supply and turn on the charger.

- **Standard charge:**

First, charge the battery to 28.8V with a constant current of 24A (0.2C), and then charge to 0.05C with a constant voltage of 28.8V (i.e. 0.05C means 0.05 x battery capacity. If the battery capacity is 120Ah, the cut-off current is 120A*0.05).

Note: All tests stated in this document shall be performed at 25±2℃.

4. Discharging Operation

1. Before discharging, ensure the load and equipment are in the off state.
2. Connect the battery to the load and equipment correctly.

WARNING: Check the battery polarity before connecting to the load and equipment. It is forbidden to reverse connect the battery.

3. Turn on the load and equipment.

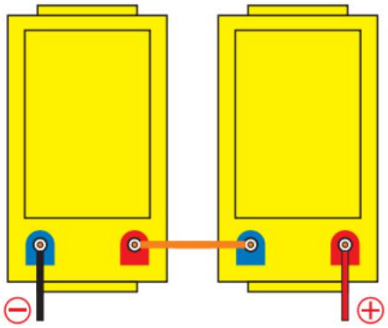
- **Standard discharge:**

After the battery is standard charged, discharging the battery with a constant current of 24A (0.2C) till the battery voltage drops to 20.8V.

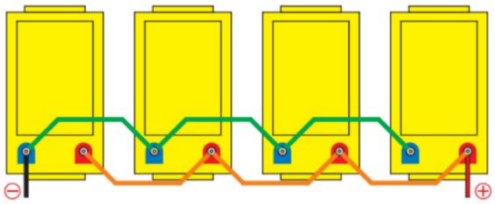
Note: All tests stated in this document shall be performed at 25±2℃.

5. Connect in series/parallel

- **Connect in series (at most 2 pcs)**



- **Connect in parallel (at most 4 pcs)**



WARNING: When the batteries are connected in series or parallel, measure the battery voltage with a multimeter. The battery voltage shall be consistent or the voltage difference is less than 0.2V (it is normal if there is a slight spark during the parallel connection). It is forbidden to connect the battery in series/parallel when the battery voltage exceeds this range.

6. Disclaimers

- Please use the LFP batteries under the product specification. It may cause fire or expansion if the batteries are used incorrect.
- We will not guarantee the performance and safety unless the batteries are used under the product specification.
- Improper use or storage of batteries resulting in poor performance is not covered by the warranty.
- When the battery cycle life meets the requirements of the specification, the battery will expire prematurely.

7. Specifications

Model	LFP3.07KWH25.6V-P65L2
Battery Type	LiFePO4
Nominal Voltage	25.6VDC
Nominal Capacity	120Ah
Energy	3072Wh
Continuous Discharge Current	60A
Charge Cut-off Voltage	28.8VDC
Discharge Cut-off Voltage	20.8VDC
Maximum Charge Current	50A
Maximum Discharge Current	100A (30min)
Peak Discharge Current	130A (＜5s)
Recommend Discharge Current	60A
Work Voltage Range	20.8~28.8VDC
Open-circuit Voltage	25.6~26.6VDC (50% SOC)
Internal Resistance	≤20mΩ @AC 1KHz
Cycle Life	4000 cycles (After the battery is charged-discharged for 4000 cycles at 50A, the residual battery capacity≥80% x initial capacity.)
Number of series/parallel	2 battery packs in series at most 4 battery packs in parallel at most
Certification	UN38.3 MSDS
Work Temperature Range	Charging: 0℃~+55℃ Discharging: -20℃~+60℃
Storage Temperature Range①	-5℃~+0℃/35℃~+45℃ (≤2month); 5℃~+35℃ (≤3 months, best storage temperature); 15℃~+35℃ (≤6 months)
Relative Humidity	60±20% RH
Connect Terminal	M8
Dimension (L x W x H)	523mm x 269mm x 218mm
Net Weight	29±0.5Kg
IP Class	IP65
Warranty	3 years (see warranty agreement for details)

① **When the battery is stored for more than 3 months, the storage voltage should be maintained at 25.6~26.4VDC.**

Any changes without prior notice! Version number: V1.2