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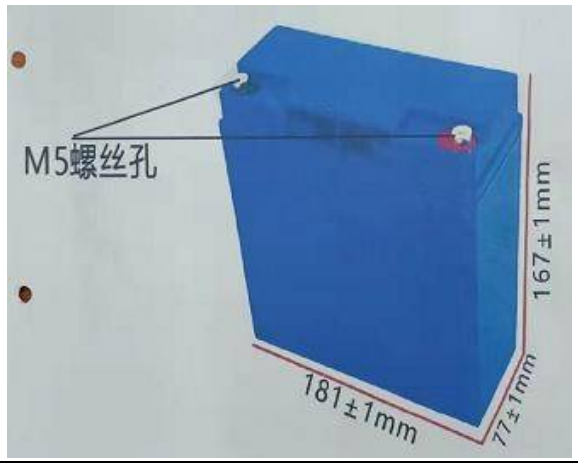
Lithium Ion Batteries Specification

Product: Lithium Ion Batteries 25.6V 12Ah

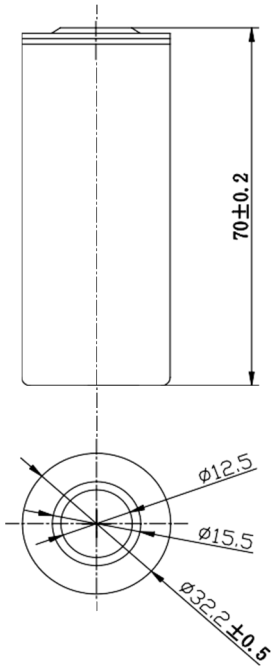
Model: **LFP24V12AH**

1.Battery Pack Parameter

Item	Parameter
Rated Voltage	25.6V
Rated Capacity (at 0.5C, 25 °C)	12Ah Min capacity: 11.76Ah @0.2C
Continuous Charging Current(A)	≤6A
Continuous Discharging Current(A)	6A
Max Continuous Discharging Current(A)	12A
Pulse discharge current	24A, last 3S
Storage Temperature	Less than 1 month：-20℃～35℃，45%RH～75％RH
	Less than 3 months：-10℃～35℃，45%RH～75％RH
	Recommended storage environment： 15℃～35℃，45%RH～75％RH
Temperature	Charging：0～45℃
	Discharging：-20～60℃
	Recommended operating temperature：15℃～35℃
Max. Charge Voltage	28V-28.4V
Cycle Life	>2000 times, 0.5C, 80%DOD, at 25℃
BMS Protection	Overcharge protection; Overdischarge protection; Overcurrent protection; short circuit protection; Temperature protection and balance function
Series connection	Prohibit
Parallel connection	Prohibit
Dimension	181*77*167mm ± 2mm(L*W*H)
Terminal	M5
Self Discharge (Stored at 50%SOC)	<= 3%/month
Assemble method	8S2P

Weight(kg)	About 3.82kg
Appearance	

2.Single cell dimensions



3.BMS Parameter

Item	Content	Criteria
Charge and discharge port		Shared
Normal current	**Charge current**	**≤12A**
	Discharge current	**≤12A**
Over charge Protection	Over charge protection voltage	3.8±0.05V
	Over charge protection delay time	⩽1s
	Over charge release voltage	3.55±0.05V

Over discharge protection	Over discharge protection voltage	2.2V±0.05V
	Over discharge protection delay time	≤1s
	Over discharge release voltage	2.8V±0.05V
Discharge Over current protection	Discharge over current protection current	75 ± 2% A
	Discharge over current protection delay time	≤1s
	discharge over current release condition	Cut load
Short circuit protection	yes, pls don't short-circuit the electrodes	
Short circuit release	Remove short circuit	
Temperature protection	Charge and discharge high temperature protection temperature	60℃
Cell balance voltage	3.5V	
Balance current	30 ± 5mA	
Balanced opening condition	Charge, cell balance open voltage difference 50mV	

4. Certifications:

- UL1642 (Cell)
- IEC62133 (Cell)
- IEC62619 (Cell)
- ROHS (Cell)
- CB(Cell)
- REACH (Cell)
- UN38.3 (Cell)
- CE (Cell)

5. Features

- Higher qualified cylindrical cell:
  UL1642, IEC62133, CB listed with Cycle life more than 3000 times and excellent consistency.
  Cell and pack are produced by ourselves. We can control quality from cell to pack.

- Stronger BMS:
  Can protect battery from overcharge, overdischarge, overcurrent, high temperature, short-circuit and have balance passive function.

- 100% Cycle test:
  All battery packs are 100% cycle tested (Fully Discharged→Fully Charged→Fully Discharged→ 50% Charged) before package.

- Unique tracking number:
  All battery packs print an unique number in the case side for quality tracking.

6. Storage and Transportation

1. Based on the character of cell, proper environment for transportation of LiFePO4 battery pack need to be created to protect the battery.
2. During transportation, 50% SOC must be kept to ensure that short circuit, appearance of liquid in the battery or immersion of battery in liquid never occur.
3. Battery should be kept at -20℃～45℃ in warehouse where it's dry, clean and well-ventilated.
4. During loading of battery, attention must be paid against dropping, turning over and serious stacking.

7. Warning and tips

In order to prevent the battery leaking, getting hot and exploding, please pay attention to preventing measure as following:

Warning!

- Never throw the battery into water, keep it under dry, shady and cool circumstance when notuse.
- Never upside down the positive and negative.
- Never connect the positive and negative of battery with metal.
- Never ship or store the battery together with metal
- Never knock, throw or trample the battery.
- Never cut through the battery with nail or other edge tool.

Tips!

- Never use or keep the battery under the high temperature. Otherwise it will cause battery heat, get into fire or lose some function and reduce the life. The proposed temperature for long-term storage is 10-45℃.
- Never throw the battery into fire or heating machine to avoid fire, explosion and environment pollution; Scrap battery should be handled by the recycle station.
- Never use the battery under strong static and strong magnetic field, otherwise it will destroy the protecting device.
- If battery leaked, the electrolyte get into eyes, please don't knead, please wash eyes by water and send to hospital. Otherwise it will hurt eyes.
- If battery emit peculiar smell, heating, distortion or appear any unconventionality during using, storage or charging process, please take it out from device or charge and stop using.
- Never cut the battery in socket directly; please use the stated charger when charging.
- Check the voltage of battery and relevant connectors before using the battery. It can't be used until everything turns out to be normal.
- Prior to charging, fully check the insulativity, physical condition and ageing status, since breakage and ageing are never allowed; the pack voltage must not be less than the cutoff voltage, if not, it's abnormal and that battery needs to be labeled. The user should contact our Customer Service Dept and it can't be charged until repaired by our staff.
- **The battery should be stored in 50% SOC. If the battery is stored for a long time, the battery should be conducted a cycle of charge and discharge every 3 months, then charge to 50% SOC.**
- Clean the dirty electrode, please use a clean dry cloth, otherwise poor contact or operation failure may occur.

- Series connection of this battery pack is prohibited.
- Parallel connection of this battery pack is prohibited.

8. Other Chemical Reaction

Because batteries utilize a chemical reaction, battery performance will deteriorate over time even if stored for a long period of time without being used. In addition, if the various usage conditions such as charge, discharge, ambient temperature, etc. are not maintained within the specified ranges, the life expectancy of the battery may be shortened or the device in which the battery is used may be damaged by electrolyte leakage. If the discharge time is much shorter than the normal after full charged, even battery is charged correctly, and this may indicate it is time to change the battery.