



48V-100Ah

LiFePO₄ Battery Pack

Name: LITHIUM ION BATTERIES

48-100

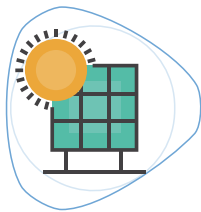
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LiFePO₄ Battery Pack



Application Places

For no city power areas, the battery pack can be charged by solar panels and used for night lighting; For the areas that city power is expensive, the battery pack can be charged during the electricity valley value period, and used at the peak power period; For the areas which power off from time to time, the battery pack can be used as UPS, to avoid information loss caused by sudden power outage. The battery pack is applicable to commercial lighting, industrial lighting, home lighting, outdoor lighting, camping tourism, farming, planting, the night market stalls, etc.



Clean energy

Using sunlight to achieve clean energy charging can supply power to household appliances.



Storing energy

Realize the freedom of electricity consumption in the area where there is no electricity and less electricity.



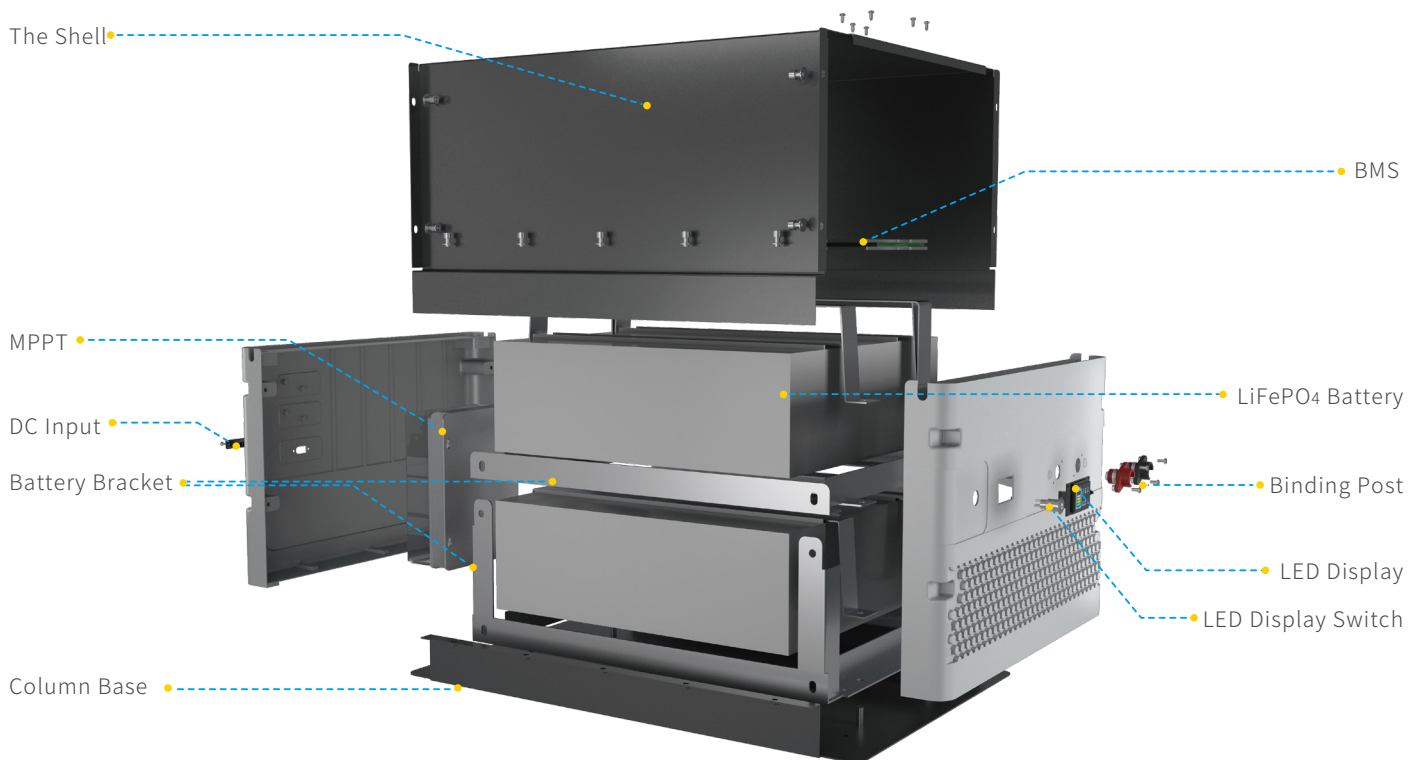
Household appliances

Free electricity

Storing the power from the solar panel, to be used as reserve power or emergency power supply. At night or at the time of power outage, it can supply the power to electrical appliances by using the stored energy, to avoid the inconvenience caused by power outage, so that you can calmly deal with the situation of power outages.

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INSTRUCTIONS



5120Wh



DC Input



Solar Panel Charging



Multiple Appliances

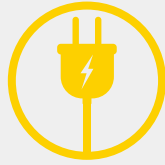
6 KINDS OF SAFETY PROTECTION



Charging Overvoltage Protection



Discharge Undervoltage Protection



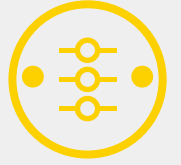
Charging Overcurrent Protection



Discharge Overcurrent Protection



Short Circuit Protection

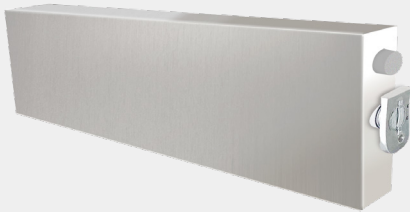


Temperature Protection

Product Details

LiFePO4 battery

Stable discharge, long cycle life, safe and environmental protection, high safety performance.



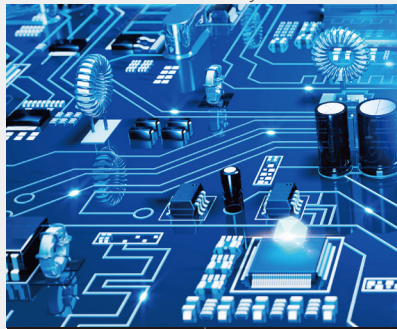
XT90 Gold plated plugs

Gold-plated brass, ensure the stable transmission of current.



BMS

Protect the battery, Prevent battery damage, Extend battery life.



Imported components



Comply with UL standard safety certification



Separate driver modules



Use insulation materials

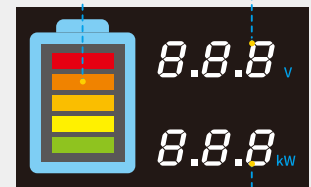
LED display

Observe the power usage at any time.



Function Introduction

Battery Remaining Capacity Real time battery voltage



Real time output



Main switch

Stainless steel push button switch, Protect the upgrade.

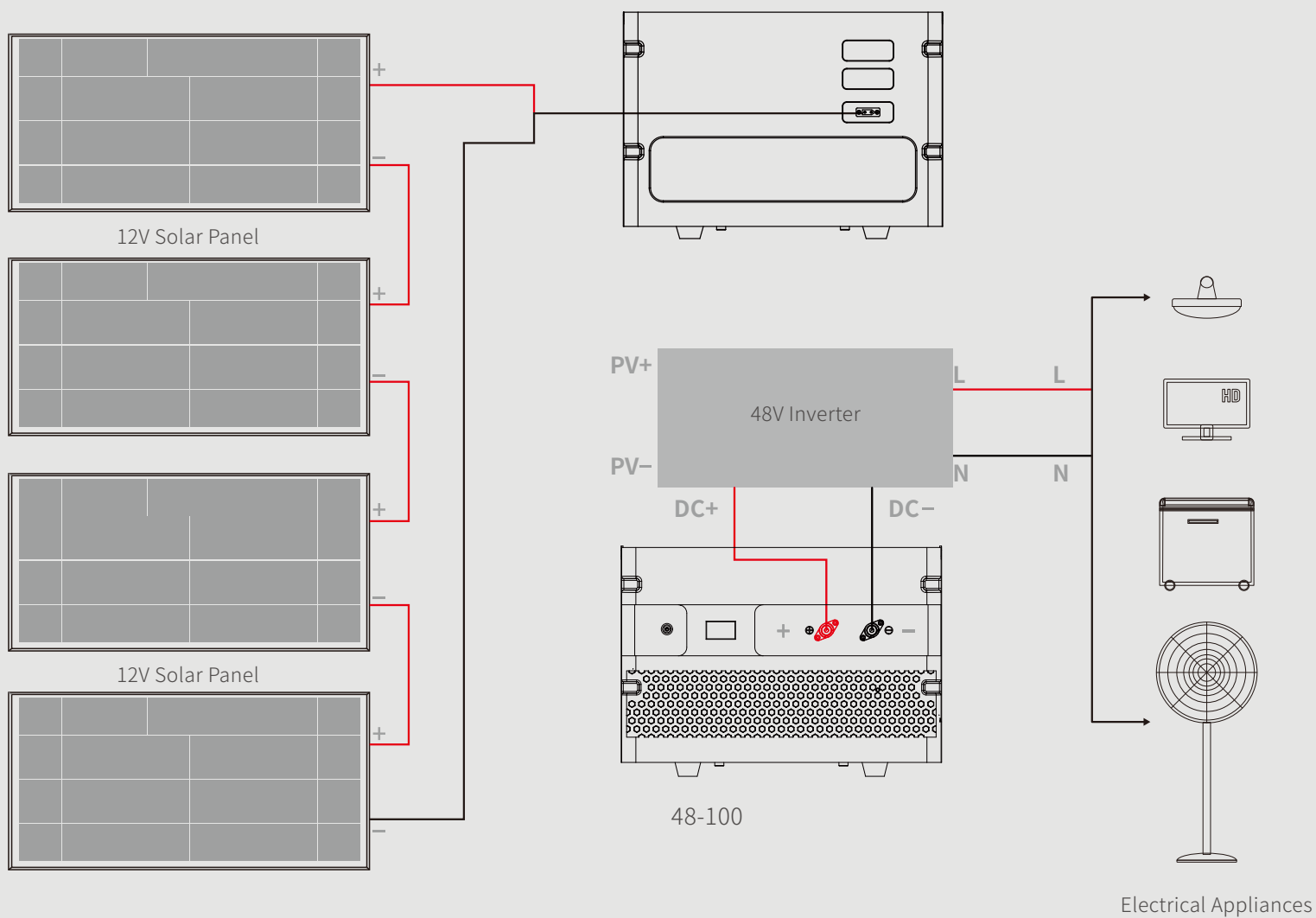
Binding post

Insulated flame retardant, fast and efficient.



High quality aluminium magnesium alloy

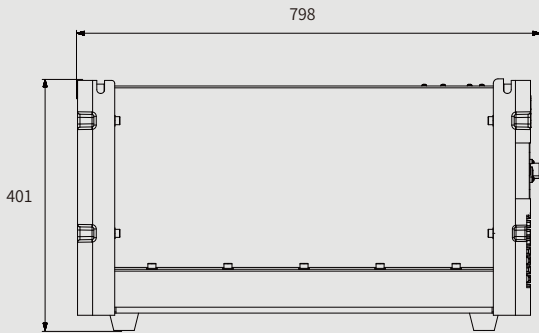
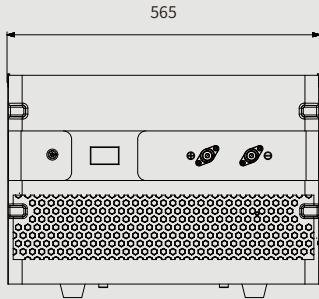
Anti-corrosion, substantial, durable, artistic, practical.



Advantages

- High quality aluminium magnesium alloy, anti-corrosion, substantial, durable, artistic, practical.
- All in one mould design and production, easy to install.
- With longer span life LiFePO₄ battery, over 12 years lifespan, ensure the whole set products' life span.
- Dustproof structure design, DC output, safe and reliable.
- Integrated packaging, safe and convenient to transport.

Product size : (mm)

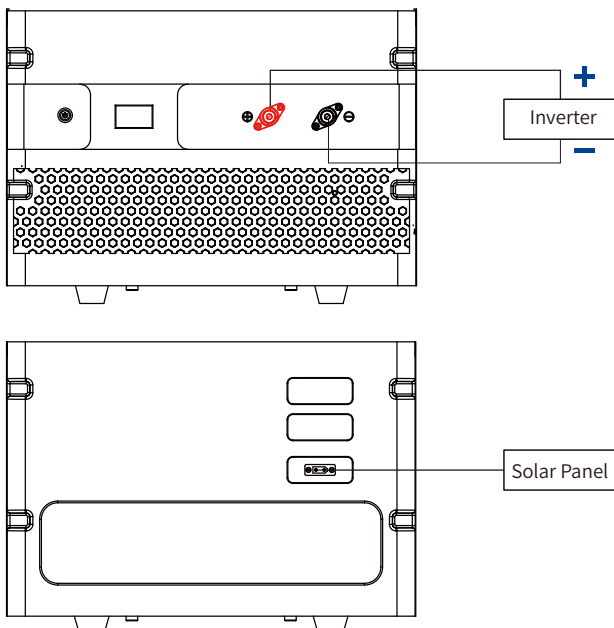


Technical Parameters

Model	48-100		
Storage capacity	5120Wh		
Standard capacity	100Ah/51.2V		
Continuously use output current	80A	Standard charging voltage	57.6V—60V
Continuously use output current	80A	Charging voltage of solar panel	44V
Maximum solar panel input current	90A		
Charging cut-off voltage	55.2V-58.4V	Discharge cut-off voltage	36V-48V
Rshoot delay protection	1000mS	Over-discharge delay protection	1000mS
Short circuit protection recovery	Disconnect load	Short circuit protection delay	330uS
Self-Discharge (25°)	<3%/month	Depth of discharge	>80%
Cycle life	>5000 times (<0.5C)	C-rate Discharge	<0.8C
Charge method(CC/CV)	Operation : -20°C—70°C; Recommendation: 10°C—45°C		
Warranty	5 years		
Product size	798 ± 2mm × 565 ± 2mm × 401 ± 2mm		

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Instructions



Attention:

1. Never invert the positive and negative; Don't short circuit the positive and negative terminals of the battery pack.
2. Do not use overload of electrical appliances.
3. The battery pack should not be used under overvoltage. The open circuit voltage of the 48V battery pack cannot exceed 88V.
4. 48V LiFePO4 battery pack should not make batteries in series.
5. The parallel connection of battery packs should not exceed two groups.
6. Never knock, throw or trample the battery.
7. Forbid soaking in water and cleaning the battery pack ; It is prohibited to put the battery pack outside in the rainy days.
8. It is strictly forbidden to disassemble and replace the battery.
9. The battery pack should be used in a clean, dry and ventilated environment, avoid contact with corrosive substances, and keep away from fire and heat sources.



The Advantages and Characteristics of LiFePO₄ Battery

- Volume: The capacity of LiFePO₄ battery is bigger than lead-acid cell, with the same volume, it is double of Lead-acid battery.
- Weight: LiFePO₄ is light. The weight is just 1/3 of lead-acid cell with the same capacity.
- Discharge rate: LiFePO₄ battery can discharge with maximum current, it is used in electric vehicles and electric bicycles.
- No memory effect: No matter the LiFePO₄ Battery is in which conditions, it can be charged and discharged whenever you like, no need to discharge totally then charge for it.
- Durability: The durability of LiFePO₄ Battery is powerful and consumption is slow. The time of charging and discharging is more than 2000times. After 2000times circulation, the capacity of the battery is still more than 80%.
- Security: LiFePO₄ battery passed the strict safety testing, with higher safety performance.
- Environmental protection: Lithium materials not have any poisonous and harmful substance. It is regarded as green and environmental protection battery. The battery has no any pollution no matter in the process of production or in the process of using.
- Well graded and combination. After multi-selection, to ensure each cell qualified with long life;
- The connection tech of all interface, be safe and durable, with simple maintenance.
- Multi-layer protection structure, could be waterproof, shockproof, anti explosion and fire.
- Various joints, could be customized, safe and durable for long run.
- Security and reliability, compared with lead-acid battery, the materials of LiFe PO₄ is the securest, the best choice of solar energy storage battery.

Storage and Transportation

- Based on the character of cell, proper environment for transportation of LiFePO₄ battery pack need to be created to protect the battery.
- Battery should be kept at -20°C—45°C in warehouse where it's dry, clean and well-ventilated.
- During loading of battery, attention must be paid against dropping, turning over and serious stacking.



Notices

- 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°C.
- Never throw the battery into fire or heating machine to avoid fire, explosion and environment pollution; scrap battery should be returned to the supplier and 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 10V, 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 half SOC. It needs to be charged once if out of use for as long as half a year.
- Clean the dirty electrode, if any, with a clean dry cloth, or poor contact or operation failure may occur.

Warning

- Never knock, throw or trample the battery.
- 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 cut through the battery with nail or other edge tool.
- Never throw the battery into water, please keep it under dry, shady and cool circumstance when not use.

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Usage Scenarios



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Usage Scenarios

