

Lithium Iron Phosphate Battery Specification

Customer	
Serial No	
Part name	LiFePO4 Battery
Model No	PKG-AIO512100 (W670*D176*H1057mm)

Approved by	Drafted by	Xiaojun Nie
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Prepared by	Date	2023-09-07

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1. Scope

The specification shall be applied to LiFePO4 rechargeable battery pack Of PKG-AIO512100 (W670*D176*H1057mm) which is manufactured by SHENZHEN PKNERGY ENERGY CO.,LTD.



2. System block diagram

3. Figures of Unit

3.1 Battery

Battery Type	LiFePO4 battery		
Battery voltage	51.2V		
Charge Voltage	57.6V		
Discharge Cut-off Voltage	43.2V		
Rated Capacity	100Ah	200Ah	300Ah
Storage Power	5.12KWh	10.24KWh	15.36KWh
Max. charge current	100A		
Max. discharge current	100A		

3.2 Specification

Dimensions	W670*D176*H1057mm	W670*D176*H1510mm	W670*D176*H1963mm
Weight	85kg	135kg	185kg
Mounting method	Stack		
Degree of protection	IP54		
Operating ambient	Charge:0~55°C/Discharg	ge: -20~55°C	
Allowable relative	0~100%		
Cooling method	Air cooled		
Max. operating altitude	4000m		
Display	LED indicator		

3.3 PV Input Specification

Recommend max.PV input power	13000 Wp
MPPT voltage range	120-500V
Number of MPPT	1

3.4 AC Input Specification

Max. AC input power from grid	13000 VA
Rated AC output power	6000 W
Max. AC output current	27.3 A
Rated AC voltage	220V/230V/240V
AC voltage range	154V~276V
Rated grid frequency	50Hz/60Hz
Grid frequency range	45~55Hz/55~65Hz
Harmonic (THD)	< 3%
Power factor at rated power	>0.99
Grid Type	Single phase

3.5 Efficiency

Max. efficiency	97.70%
European efficiency	97.30%

3.6 Protection Function

Gird monitoring	Yes
DC reverse polarity protection	Yes
AC short circuit protection	Yes
Leakage current protection	Yes
Surge Protection	DC type II/AC type II
DC swith (PV)	Yes
DC fuse (battery)	Yes
Battery input reverse polarity	Yes

4. Effect picture



5. Others

Any matters that this specification does not cover should be conferred between the customer and SHENZHEN PKNERGY ENERGY

CO.,LTD

6. Amendment of this Specification

This specification is subject to change with prior notice.

7. Storage and Others

7.1 Long Time Storage

If stored for a long time(don't used, exceed three months), the cell should be stored in drying and cooling place. The cell's storage voltage should be 48.0V-51.0V and the cell is to be stored in a condition that the temperature of 23 ± 2 °C and the humidity 0f 45%-75%. Long-term use of unused batteries to recharge every 3 months. Ensure that the battery voltage is within the above range.

7.2 Others

Any matters that this specification does not cover should be conferred between the customer and SHENZHEN PKNERGY ENERGY CO.,LTD.

8. Amendment of this Specification

This specification is subject to change with prior notice.

Danger!

- Do not immerse the battery in water or allow it to get wet.
- Do not use or store the battery near sources of heat such as a fire or heater.
- Do not reverse the positive(+) and negative(-) terminals.
- Do not put the battery into a fire or apply direct heat to it.
- Do not short- circuit the battery by connecting wires or other metal objects to the positive(+) and negative(-) terminals.
- Do not pierce the battery casing with a nail or other sharp object, break it open with a hammer, or step on it.
- Do not strike, throw or subject the battery to sever physical shock.
- Do not directly solder the battery terminals.
- Do not attempt to disassemble or modify the battery in any way.

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