

Rack Mount Lithium Battery



Technical Specifications

Model	ZXJC-DY03-2.56	ZXJC-DY03-2.56xN	ZXJC-DY04-1.64	ZXJC-DY04-1.64xN		
Battery Energy [™]	2.56kWh	N*2.56kWh	1.64kWh	N*1.64kWh		
Battery Module	ZXJC-DY04-2.56	: 51.2V 2.56kWh	ZXJC-DY04-1.64: 51.2V 1.64kWh			
Module Qty.	1	N	1	N		
Battery Chemistry	LiFePO4	LiFePO4	LiFePO4	LiFePO4		
Nominal Voltage	51.2V					
Operating Voltage Range	44.8~57.6Vdc	44.8~57.6Vdc	44.8~57.6Vdc	44.8~57.6Vdc		
Nominal Charge/Discharge Current *2	25A	N×25A ^{*3} (N≤25)	16A	N×16A ^{*3} (N≤16)		
Nominal Charge/Discharge Power *2	1.28kW	N×1.28kW*3	0.82kW	N×0.82kW ^{*3}		
Operating Temperature	charging: 0℃~+50℃; discharging: -10℃~+50℃;					
Storage Temperature	0°C~+40°C (<1 year), -20°C~0°C (≤1 month), +40°C~+45°C (≤1 month)					
Humidity	0%~95%					
Maximum Altitude	3000m					
Cycle Life	6000 Cycles @ 80% DOD / 25°C / 0.5C, 60% EOL					
Scalability	Max 16 batteries in parallel					
Display	SOC status indicator, LED indicator					
Communication Port	RS232, RS485, CAN					
Warranty Period	10 years					

Net Weight	20±2kg	N×20±2kg	15±2kg	N×15±2kg	
Dimension (W×H×D mm)	Unit module: 442×142×390mm (no handles); 483x142x390mm (handles included)				
Protection Level	IP20				
Installation	Rack-Mounted or Cabinet-Mounted				
Certification	PACK: UN38.3, IEC62619, IEC61000, CELL: UN38.3, IEC62619 (more available upon request)				

^{*1:} New battery, test conditions: 100% depth of discharge (DoD), 0.2C rate charge & discharge at 25±2°C temperature range, System usable energy may vary due to system configuration parameters.

- *2: Nominal charge and discharge current and power are affected by temperature and SOC.
- *3: With a combiner box to connect batteries in parallel

Protection Functions

电池内置保护电路模块(PCM),保证电池充放电安全。

The battery is packed with the Protection Board, protection circuit module(PCM), which can ensure the safety of this battery in charging and discharging. Mainly used as backup power supply for 16 strings lithium battery base station communication, residential energy storage and other systems. It can monitor the working status (voltage, current, temperature, etc.) of battery pack to alarm and protect the over/under voltage, over current, over temperature, reverse connection, etc. It can also provide the balanced protection function to extend the service life for battery cell, and realize the data monitoring parameter configuration and firmware upgrade via RS232, RS485, CAN BUS and other interfaces.

The main functions of the BMS are as follows:

1) 过压/欠压保护

Over/under voltage protection

2) 过充保护

Over charge protection;

3) 过放保护

Over discharge protection;

4) 温度保护

Temperature protection;

5) 充放电过流保护

Charge/Discharge Over current protection;

6) 反接保护

Reverse connection protection

7) 提供电芯均衡保护功能,延长电芯寿命

Provide balanced protection function to extend the service life for battery cell

8) 软件保护板, RS485/RS232/CAN通讯功能, 支持对接逆变器通讯

Software protection board, RS485/RS232/CAN communication function, supporting communication with inverter docking