

Excellent Safety LiFePO4 Battery Cells



Product Advantage

Flexible

- Multiple use scenarios and applications
- Easy and simple installation

Elegant

- Stylish appearance, light and easy to use
- Natural cooling, low noise
- Wall-mounted design, space-saving

Reliable

- Battery reverse connection protection
- Compatible for backflow prevention function

Advanced

- Home Smart Energy Management Terminal
- Power dispatch and demand-side response management nodes
- Distributed virtual power plant management nodes

Application Scenario



Battery Pack Normal Performance

MODEL:TE-PAW5				
NO.	Item	General Parameter		Remark
01	LiFePO4 Battery	LiFePO4 Battery		
02	Standard capacity (0.2C)	100Ah		
03	Rated voltage	51.2V		Work voltage
04	Rate Power	5120Wh		
05	Internal Impedance	≤60mΩ		Internal resistance measured at AC 1KHZ after 50% charge
06	Max. Charge voltage	58.4V		Voltage of Charger Selection)
07	Cut-off voltage	46V		BMS discharge cut- off voltag
08	Standard charge current	20A-100A		Max. charge current 100A
09	Continuous discharge curren	0~100A		
10	Max Continuous discharge current	130A		1,000ms
11	Battery dimension	L: 656±3mm × W: 471±3mm × H: 186±3mm		
12	Total weight (Approx.)	Approximately 51kg		Subject to actual measurement
13	Charge method(CC/CV)	Standard	0°C~55°C	Charge
		Discharge	-20°C~55°C	
		Storage	-20°C~60°C	
14	Capacity @ shipment	20-50%		SOC
15	Certification	UK, EU CE compliant; CE / IEC62619, UN38.3, MSDS. And suited to G98 G99 certification IP65 Inverter.		

Cell basic characteristics

16cells, 1 parallel and 16serial, make a battery pack, Cell performance is as follows.

NO.	Item	General Parameter
01	Cell Type	LiFePO4 Battery
02	Cycle Life	≥ 10000cycles
03	Nominal Voltage	3.2V
04	Nominal Capacity	100Ah
05	Internal Resistance	≤ 1mΩ (AC 1kHz)
06	Discharge Cut-off Voltage	2.5V
07	Max. Charge Current	50A
08	Max. Discharge Current	100A
09	Max. Discharge Current (Peak)	300A (<30Sec)
10	Max. Charge Voltage	3.65V
11	Charge Method	CC/CV (Constant current/constant voltage)
12	Weight	2kg
13	Charging Temperature	0°C~45°C
14	Discharging Temperaturee	-20°C~60°C
15	Storage Temperature	0~25°C (≅one month)
16	Relative Humiditye	≅65%
17	Voltage of Shipment	20-50% SOC

Protective board

The protection board, provides protection against overcharge, Over discharge, Over current, short circuit, and over temperature through monitoring single string of cells. Also it enables every battery pack to obtain independent balancing function..

Item	Content	General Parameter	Unit	Remark
Overcharge voltage protection	Single cell overcharge protection threshold	3.8±0.05	V	
	Delay time of single cell overcharge protection	0-1000	mS	
	Recovery threshold of single cell overcharge protection	3.34±0.05	V	
Over-discharge protection	Single cell overdischarge protection threshold	2.5±0.05	V	
	Delay time of single cell overcharge protection	0-1000	mS	
	Recovery threshold of single cell over-discharge protection	2.9±0.1	V	
	Sleep wake condition	Connect charger		
Charge overcurrent protection	Charging overcurrent protection threshold 1	21	A	
	Charging overcurrent protection delay 1	0-1	S	
	Recovery conditions of charging overcurrent protection	Remove charger		
Discharge overcurrent protection	Discharge overcurrent protection	Over current protection I: 130 Over current protection II: 150	A	
	Discharge overcurrent protection delay 1	Over current protection I: 0-1000 Over current protection II: 50-150	mS	
	Recovery conditions of discharge overcurrent	Load release	V	
Short circuit protection	Discharge short circuit protection threshold	/	A	
	Discharge short circuit protection delay	200-800	μS	
	Short circuit protection recovery conditions	Load release		Load release / automatic recovery
High temperature protection	Discharge high temperature protection threshold	60	° C	
	Discharge high temperature protection threshold	55	° C	
	Charging high temperature protection threshold	55	° C	
	Charging high temperature recovery threshold	50	° C	
	High temperature protection recovery delay	1	S	
Low temperature protection	Discharge low temperature protection threshold	-25	° C	
	Recovery threshold of discharge low temperature protection	-20	° C	
	Charging low temperature protection threshold	-0	° C	
	Recovery threshold of charging low temperature protection	5	° C	
	Low temperature protection recovery delay	1	S	
Self consumption	Working current	≤ 35	mA	
	Sleep current	< 100	μA	
Equalizing	Balancing current	30	mA	
	Balancing voltaget	3.4	V	