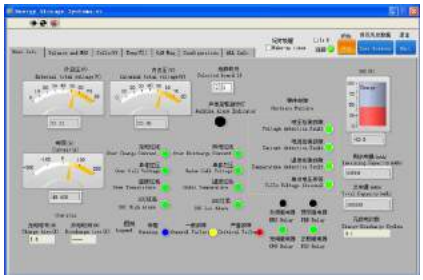
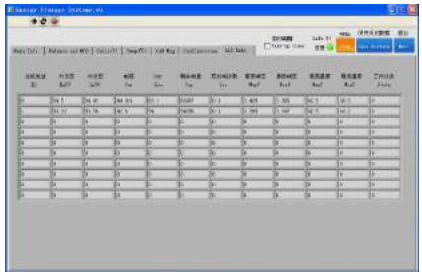
Battery Energy Storage System(ESS)

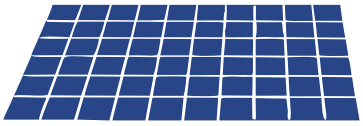
- 32pcs 75Ah LiFePO4 battery
- 12.8/25.6/51.2Vdc 7.68KWH rated capacity
- Long cycle life 3500 times at least on 80% DOD
- Customized charger make system life maxmization
- High reliability intelligent BMS
- Unique automatic calibration active balancing technology BMS system
- 12.8/25.6/51.2Vdc voltage output , suitable for home energy storage system, communication stations and other application
- Standard CAN & RS485 communication port, can meet the requirement of several packages to connect in parallel, Master & Slave relationship, Monitor and otherprolongation functions.





Operational Principle

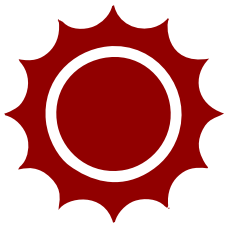
Energy storage in power system including solar panels, inverter (for AC and DC conversion), and provide backup power for the main electrical backup lines. Household electricity demand different choice of different components.



solar panels

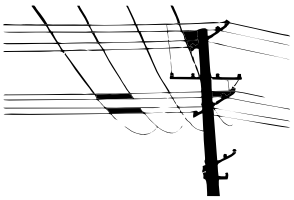
Absorption and transformation

Charge storage



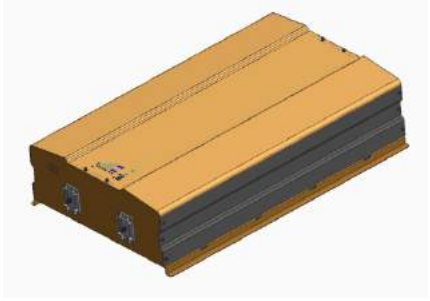
solar energy

Provide electricity



Power plant

Provide electricity

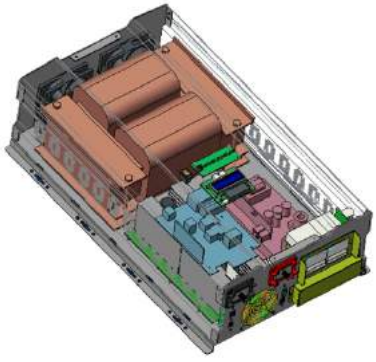


Energy storage battery pack

Charge storage

power cut

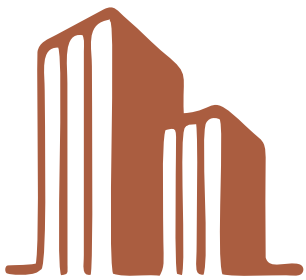
power cut



Inverter

Current conversion

Provide electricity



user

General Information

This specification defines the performance of rechargeable LiFePO4 battery pack describes the type, performance, technical characteristics, warning and caution of the battery pack.

Basic Specification

NO	Items	Description		
Normal specification				
1	Rated Voltage	12.8V	25.6V	51.2V
2	Rated Capacity	600Ah	300Ah	150Ah
3	Rated Energy	7.68KWH	7.68KWH	7.68KWH
4	Battery Configuration	4S8P	8S4P	16S2P
5	Battery Cell	3.2V75AH 32PCS		
Standard Charge				
1	Battery operation temperature range @charging	0~45℃		
2	Max charge voltage	12.8±0.1V	29.2±0.2V	58.4±0.4V
3	Rated charge voltage	14.0±0.1V	28.0±0.2V	56.0±0.4V
4	Allowed MAX charge current	240A	120A	90A
5	Rated charge current	200A	100A	75A
Standard discharge				
1	Battery operation temperature range @discharging	-20~60℃		
2	Output Voltage Range	10~14.6V	20~29.2V	20~29.2V
3	Allowed MAX discharge current	440A 1min	220A 1min	165A 1min
4	Peak discharge current	480A 5s	240A 5s	180A 5s
5	Rated dischargecurrent	400A	200A	150A
6	Discharge Cut-off voltage	10V	20V	40V
Operation and Indicator				
1	Power Switch	ON: all function start OFF: all function shut down		
2	Run LED (green)	Lighting: System working normal Flash: System standby		
3	Alarm LED (red)	Lighting: System fault Flash: System warning		
4	SOC LED (4pcs green)	Charging: SOC<25% LED1、LED2、LED3、LED4 flash in turn 25%<SOC<50% LED1 lighting,LED2、LED3、LED4 flash in turn		

			50%<SOC<75% LED1、LED2 lighting,LED3、LED4 flash in turn 75%<SOC<95% LED1、LED2 lighting,LED3、LED4 flash in turn LED1、LED2、LED3 lighting,LED4 flash Discharging: SOC>75% LED1、LED2、LED3、LED4 lighting 50%<SOC<75% LED1、LED2、LED3 lighting,LED4 off 25%<SOC<50% LED1、LED2 lighting,LED3、LED4 off 10%<SOC<25% LED1 lighting,LED2、LED3、LED4 off SOC<10% LED1 flash,LED2、LED3、LED4 off
Communication			
1	RS485		For LCD remote control（option）
2	CAN		PC control and monitor（one communication CAN card support ten packs parallel ）
Mechanical Characteristics			
1	Dimension		Length:800mm
			Width:530mm
			Height:178mm
2	Weight		Approx. 100Kg
Storage and Transportation requirements			
1	Storage Temperature	Less than 1 month	-20~35℃
		Less than 6 month	-10~30℃
2	Storage Humidity		45~75%RH
3	SOC	Storage	60~75% SOC
		Transport	45~55% SOC