



COMMUNICA

A World Of Electronics

12.8V 8A battery is a powerful LiFePO4 battery product, has the highest capacity in a standard casing available on the market.

The highly sophisticated and integrated BMS with very low self consumption, brings safety, functionality and ease of use together in a lightweight and robust casing.

Suitable SLA Replacement – Gate Motor, Energizer, Alarm System



Benefits of Lithium Polymer

- High capacity, low weight, Increased energy in given space
- Fast charging
- High operational reliability
- Safest lithium technology
- Excellent long life times
- Built-in intelligent BMS to protect the battery pack at any time and prolong its service life
- Maintenance free

Certifications and Standards

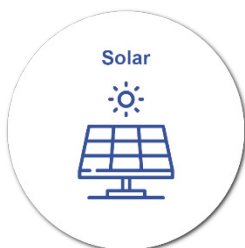
a.Products

- UL1642(cells)
- FCC
- UN38.3
- IEC62619

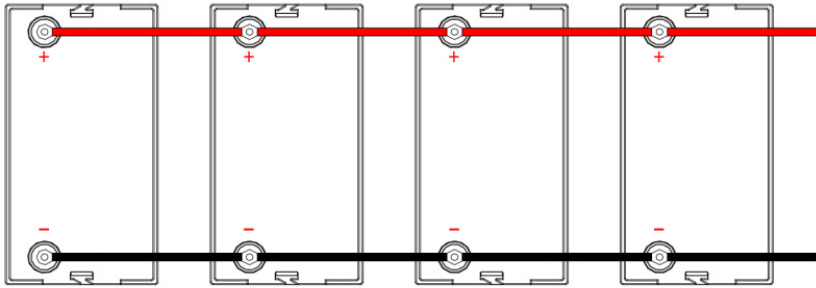
b.MS certifications

Specifications

Nominal Characteristic	
Nominal voltage	12.8V
Typical capacity	8Ah(25°C,0.2C)
Typical energy	102.4Wh
Cells type/chemistry	Prismatic-LiFePO4
Gravimetric Energy density	108.9Wh/Kg
Dimensions	Height
	Width
	Length
Reference Weight	0.94Kg
Case Material	ABS
Cycle life	>6000 cycles(80% DoD)
Electric Characteristics	
Charge Method	CC/CV
Charge voltage Range	14.3-14.6V
Max continuous Discharge Current	20A
Max continuous Charge Current	8A
Discharge Pulse Current (10 sec)	40A
Standard charge current (0.2C)	1.6A
End of Discharge Voltage	10.5V
Operation Environment	
Operating Temperature	-20°C~+70°C
Charge Temperature	0°C~55°C
Discharge Temperature	-20°C~60°C
Storage Temperature	-10°C~50°C
Protection Class	IP56

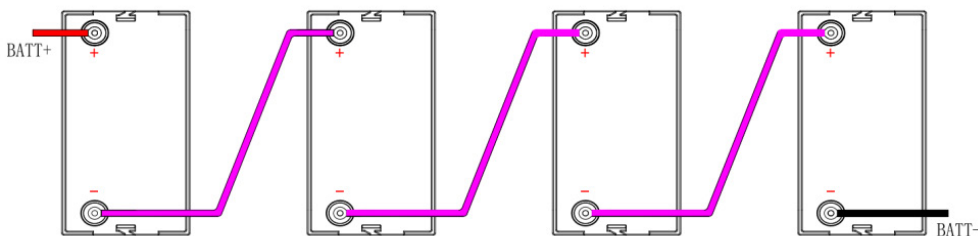


Parallel Connection of Batteries



Capacity of parallel battery	Battery Numbers	Charge	Discharge
		Limited voltage	Cut-off voltage
12.8V/Capacity*1	1 pcs	14.6 V	10.8 V
12.8V/Capacity*2	2 pcs	14.6 V	10.8 V
12.8V/Capacity*3	3 pcs	14.6 V	10.8 V
12.8V/Capacity*4	4 pcs	14.6 V	10.8 V

Series Connection of Batteries



Inverter/Charger Type	Battery	Charge	Discharge
		Limited voltage	Cut-off voltage
12V	1 pcs	14.6 V	10.8 V
24V	2 pcs	29.2 V	21.6 V
36 V	3 pcs	43.8 V	32.4 V
48 V	4 pcs	58.4 V	43.2 V

BMS Specifications

ITEM	CONTENT	CRITERION
Voltage	Charging voltage	3.65V/cell
	Balance voltage	3.45V/cell
Current	Max continues charge current	8A
	Max continues discharge current	20A
	Over charge detection voltage	3.75±0.05V
Over charge Protection	Over charge detection delay time	1-3S
	Over charge release voltage	3.6±0.05V
	Over discharge detection voltage	2.5±0.05V
Over discharge Protection	Over discharge detection delay time	1-3S
	Over discharge release voltage	2.70±0.10V
	Over discharge current protection	75A
Over current protection	Detection delay time1	50-150mS
	Over charge current detection current	26A
	Detection delay time	300-800mS
Short Circuit Protection	Short Circuit Protection Current	130A, External short circuit
	Detection delay time	400uS
Battery temperature	Release condition	Cut load and charging
	Over-temperature protection	65±5°C
	Release temperature	50±5°C

Performance Curve

