LiFePO4 Power Battery LFP12V100 12.8V 100Ah

LiFePO4 Technology Brief Introduce

LiFePO4 technology surpasses lead acid technology in all areas: reliability, performance, security, cleanliness…

- Weight/power ratio = 70% lighter than lead acid batteries
- Battery life = lasts 4 to 5 times longer than conventional lead acid batteries
- Very low self-discharge rate
- Wide range of operating temperatures = from 20° C to 60° C
- Unlike lead acid batteries, incomplete charges have no impact on battery life
- Extra security = leak-proof, as the battery does not contain acid. LiFePO4 batteries can therefore be installed in any position without risk of leakage. LiFePO4 technology eliminates the risk of explosion or combustion.

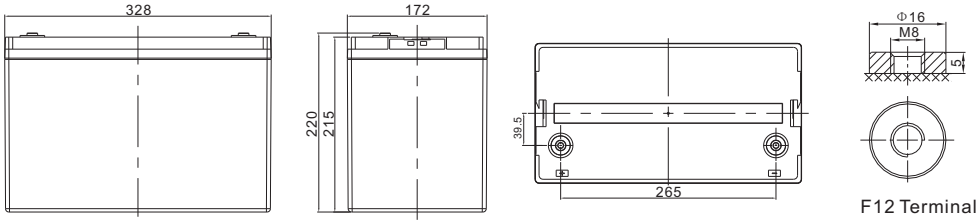
LiFePO4 batteries are equipped with protection against short circuit currents (BMS), which protects the battery from short circuits, overloads and deep discharge. The BMS also balances cells in order to guarantee longer battery life.

Long Life | *Lithium Iron Phosphate* | *Deep Cycle*

Applications

- Electric Vehicles, Electric Mobility
- Solar/Wind Energy Storage System
- UPS, Backup Power
- Telecommunication
- Medical Equipment
- Lighting

Dimensions & Weight



- Length: 330±1mm Width: 172±1mm Height:215±1mm Total Height: 220 ±1mm
- Weight: 12.5+0.1kgs

Technical Specifications

Electrical Characteristics	Nominal Voltage	12.8V
	Nominal Capacity	100Ah
	Energy	1280Wh
	Terminal	M8
	Cycle Life	＞2000cycles @1C
	Months Self Discharge	＜3%
	Efficiency of Charge	100 % @0.2C
	Efficiency of Discharge	96 ~99% @0.5C
Standard Charge	Charge Voltage	14.6-15.2V
	Charge Mode	0.2C to 13.6V, then 13.6V, charge current to 0.02C(CC/CV)
	Charge Current	30A
	Max. Charge Current	100A
	Charge Cut-off Voltage	14.6V±0.2
Standard Discharge	Continuous Current	50A
	Max continuous discharge current	100A
	Discharge Cut-off Voltage	10V
Environmental	Charge Temperature	0 ℃to 45 ℃(32 F to 113 F) @60±25 % Relative Humidity
	Discharge Temperature	-20 ℃to 60 ℃(-4F to 140 F) @60±25 % Relative Humidity
	Storage Temperature	0 ℃to 40 ℃(32 F to 104 F) @60±25 % Relative Humidity
	Water Dust Resistance	IP21
Mechanical	Cell & Method	Square Cell 3.2V100Ah ETC, 4S*1P
	Plastic Case	ABS
	Dimensions (in./mm.)	330*172*215mm (Customized)
	Weight (lbs./kg.)	Approx:12.5Kg (27.56lbs)
	Gravimetric specific energy	102.4WH/KG
	Bluetooth (optional)	/
	LCD display (optional)	/

Note: The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Contact **CSBattery** for the latest information.

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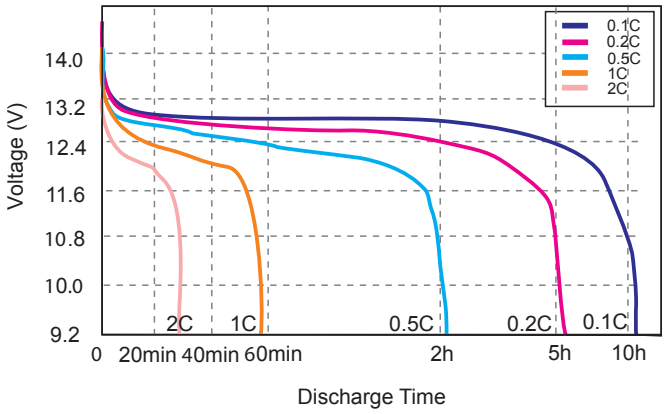
LiFePO4 Power Battery LFP12V100 12.8V 100Ah

BMS Specifications

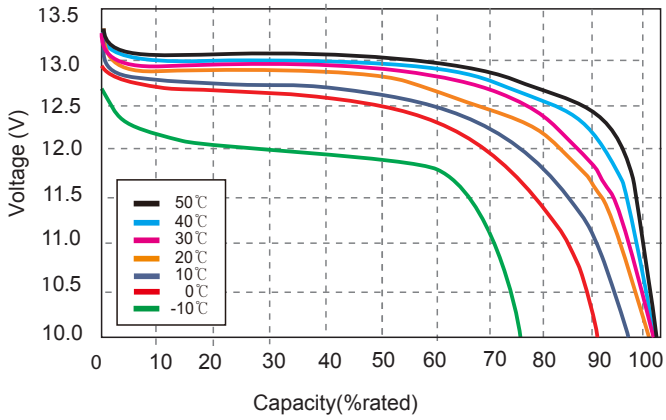
- Overcharge detection function
- Over discharge detection function
- Over current detection function
- Temperature protection
- Short detection function
- Balance function

Performance Characteristics

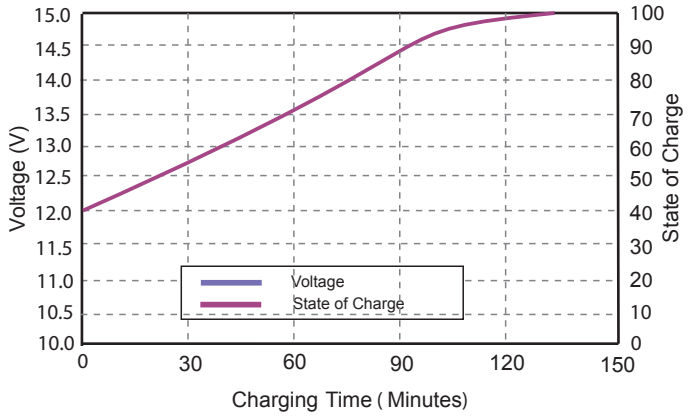
Different Rate Discharge Curve (25°C)



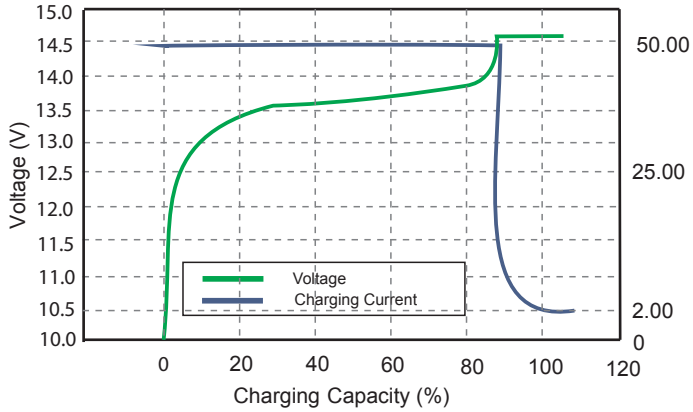
Different Temperature Discharge Curve At 0.5c



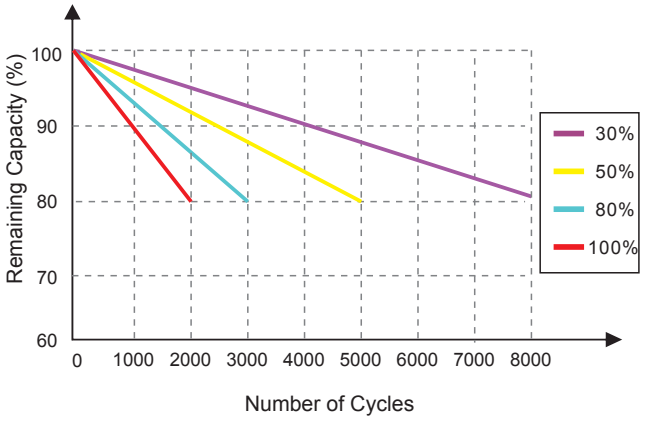
State Of Charge Curve At 0.5c (25°C)



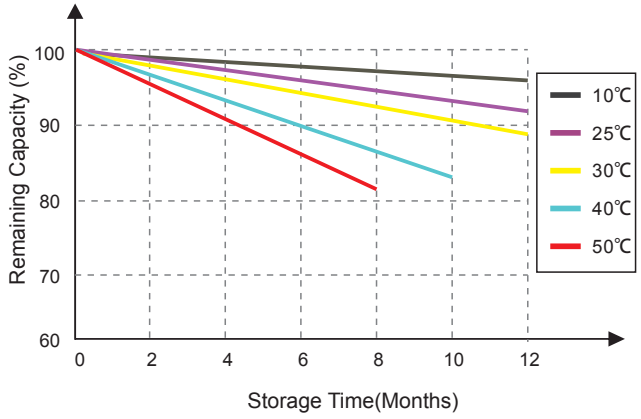
Charging Characteristics At 0.5c (25°C)



Cycle Life Curve At 1c According Dod



Self Discharge Characteristics Curve



SAFETY WARNING: USE ONLY WITHIN THE ALLOWED PARAMETERS. Do not short circuit or over-load the battery. Charge only using an approved charger designed specifically to charge this battery. Do not heat above maximum temperatures indicated. Never crush, mutilate, puncture or abuse the battery. Do not dismantle the pack or disable any of the protective devices or circuits. DO NOT USE THE BATTERY IF YOU SUSPECT IT MAY BE FAULTY OR DAMAGED.

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