

AA Champion

LFP12V200Ah

Features Of LiFePO4 Battery

Longer Cycle Life: Offers up to 20 times longer cycle life and five times longer float/calendar life than lead acid battery, helping to minimize replacement cost and reduce total cost of ownership.

Lighter Weight: About 40% of the weight of a comparable lead acid battery. A 'drop in' replacement for lead acid batteries.

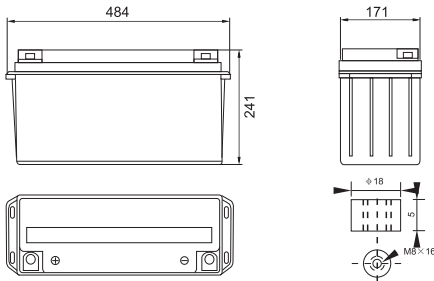
Higher Power: Delivers twice power of lead acid battery, even high discharge rate, while maintaining high energy capacity.

Wider Temperature Range: -20°C~60°C.

Superior Safety: Lithium Iron Phosphate chemistry eliminates the risk of explosion or combustion due to high impact, overcharging or short circuit situation.



Physical Dimension-mm



Typical Applications

- Wheelchairs and scooters
- Solar/wind energy storage
- Back-up power for small UPS
- Golf trolleys & buggies
- Electric bikes
- Tools

Specification

Mechanical	Plastic Case	ABS
	Approx. Dimensions	484mm*171mm*241mm
	Approx. Weight	18.4kg (40.48 lbs)
	Terminal	T50
Electrical Characteristics	Nominal Voltage	12.8V
	Nominal Capacity	200Ah
	Energy	2560Wh
	Internal Resistance(AC)	≤8 mΩ
	Cycle Life	>2000 cycles @1C 100 %DOD
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.5C
Standard Charge	Efficiency of Discharge	96~99% @1C
	Charge Voltage	14.6±0.2V
	Charge Mode	0.2C to 14.6V, then 14.6V,charge current to 0.02C (CC/CV)
	Charge Current	50A
	Max. Charge Current	100A
Standard Discharge	Charge Cut-off Voltage	14.6V±0.2V
	Continuous Current	400A
	Max. Pulse Current	400A(<3s)
Environmental	Discharge Cut-off Voltage	8V
	Charge Temperature	0 °C to 55 °C (32F to 131F) @60±25 % Relative Humidity
	Discharge Temperature	-20 °C to 60 °C (-4F to 140F) @60±25 % Relative Humidity
	Storage Temperature	-20 °C to 45 °C (-4F to 113F) @60±25 % Relative Humidity
	IP Class	IP65

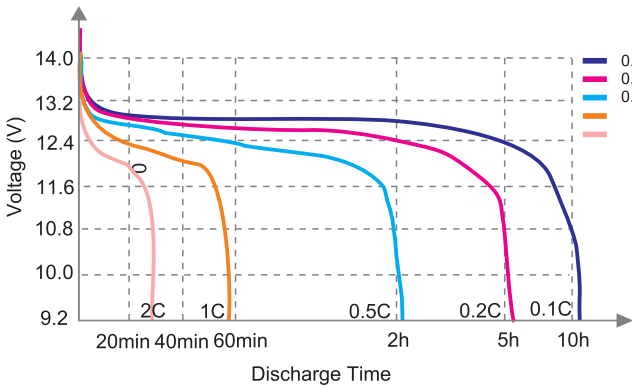
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BMS CHARACTERISTICS

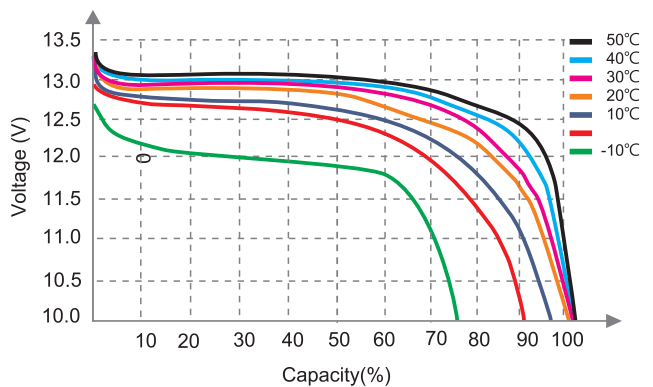
Primary Charging Protection	Current : 105 A	Delay Time: 20s
Second Charging Protection	Current : 200 A	Delay Time: 2~3 s
Primary Discharging Protection	Current : 110 A	Delay Time: 30s
Second Discharging Protection	Current : 200A	Delay Time: 2~3s
Over Charge Voltage Protection	Voltage : 14.6 v	Delay Time: 1~2s
Over Discharge Voltage Protection	Voltage : 10.8V	Delay Time: 1~2s
Temperature Protection	PCB Temperature $\geq 95^{\circ}\text{C}$	Delay Time: 2~3s
Bluetooth(App)	Optional	
Heating Function	Optional	

4 Batteries in Series 4 batteries in Parallel 16pcs in total.

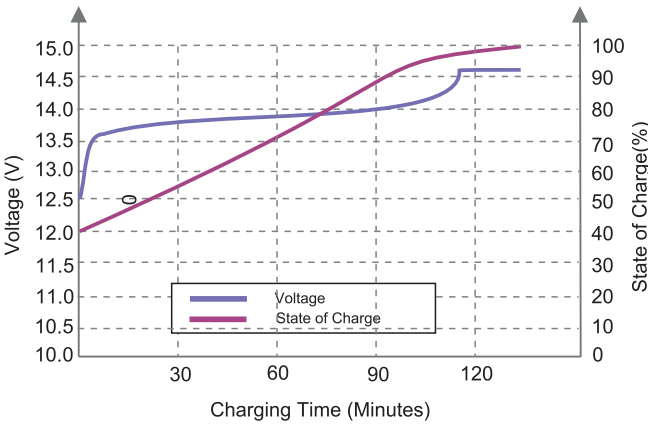
Different Rate Discharge Curve(25°C)



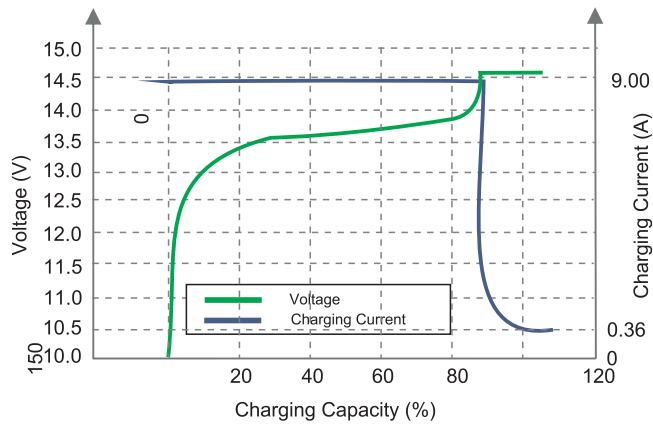
Different Temperature Discharge Curve(0.5C)



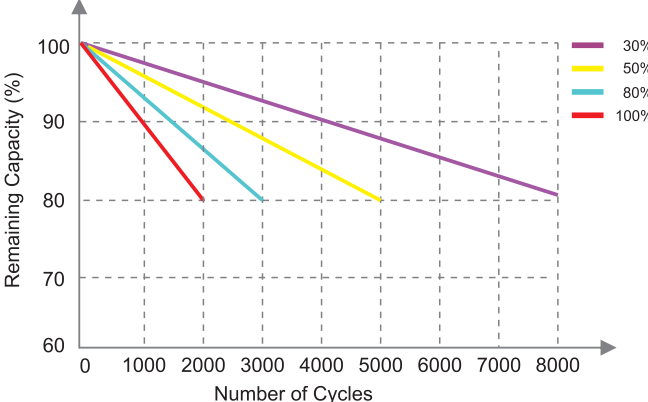
State of Charge Curve(0.5C, 25°C)



Charging Characteristics(0.5C, 25°C)



Different DOD Discharge Cycle Life Curve(1C)



Different Temperature Self Discharge Curve

