

Lithium Iron Phosphate (LiFePO₄) Battery

LFP12.8V300AH

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.

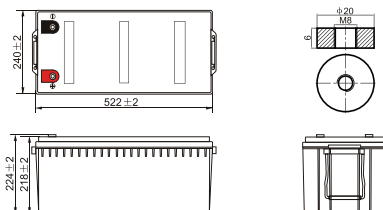
Higher Power: Delivers twice power of lead acid battery, even high discharge rate, while maintaining high energy capacity.

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

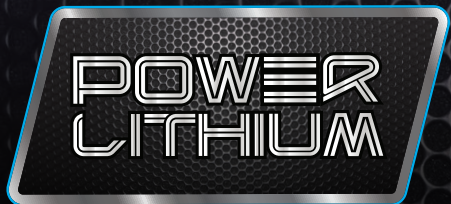


Typical Applications

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

Specification

Electrical Characteristics	Nominal Voltage	12.8V
	Nominal Capacity	300Ah
	Energy	3840 Wh
	Internal Resistance(AC)	≤20mΩ
	Cycle Life	>3000 cycles @0.5C 80%DOD
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.5C
	Efficiency of Discharge	96~99% @1C
Standard Charge	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	150A
	Max. Charge Current	300A
	Charge Cut-off Voltage	14.6V±0.2V
Standard Discharge	Rated Discharge Current	150A
	Max. Discharge Current	300A
	Discharge Cut-off Voltage	10V
Environmental	Charge Temperature	0℃ to 55℃ (32F to 131F) @60±25% Relative Humidity
	Discharge Temperature	-20℃ to 60℃ (-4F to 140F) @60±25% Relative Humidity
	Storage Temperature	-20℃ to 45℃ (-4F to 113F) @60±25% Relative Humidity
	IP Class	IP67
Mechanical	Plastic Case	ABS
	Approx. Dimensions	522mm*240mm*224mm (20.55in.*9.45in.*8.82in.)
	Approx. Weight	25.0kg (55.12lbs)
	Terminal	M8

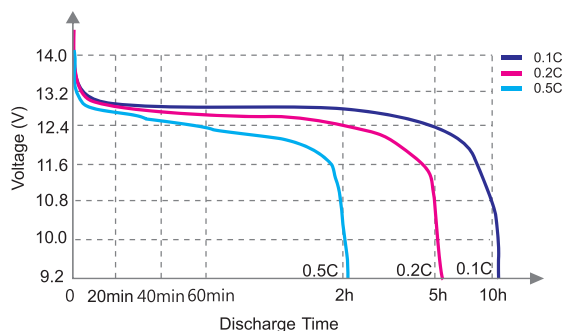


LifePO4 LITHIUM ION

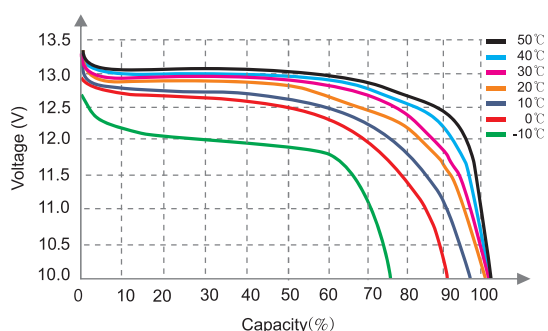
Lithium Iron Phosphate (LiFePO₄) Battery

LFP12.8V300AH

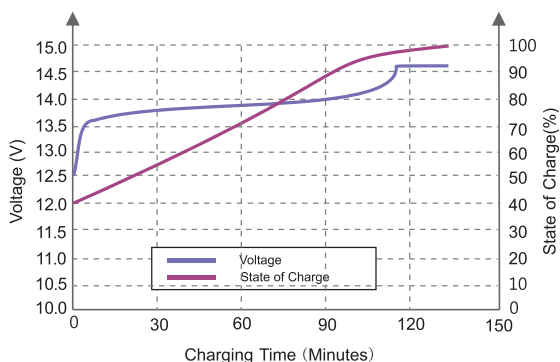
Different Rate Discharge Curve(25°C)



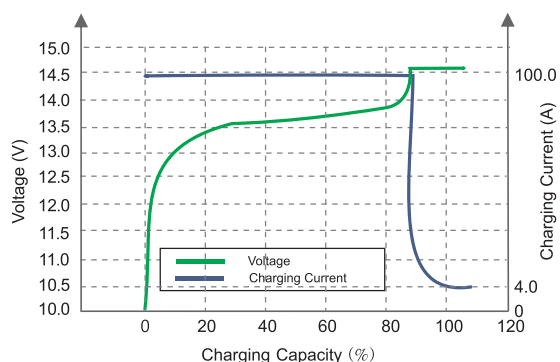
Different Temperature Discharge Curve(0.5C)



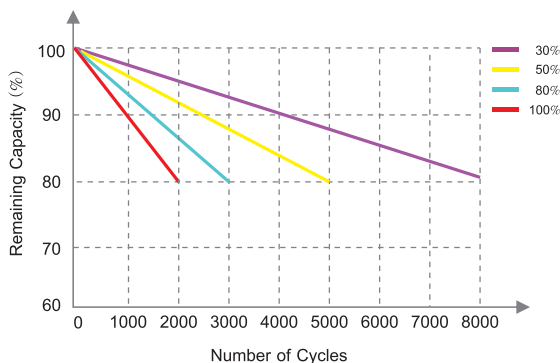
State of Charge Curve(0.5C, 25°C)



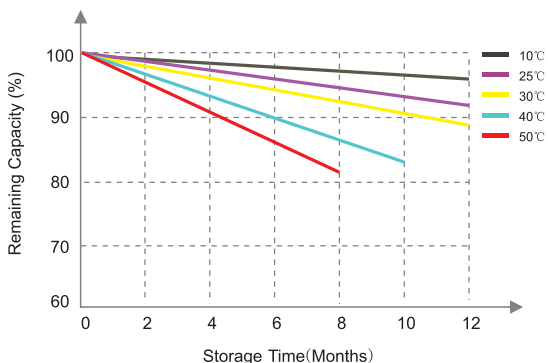
Charging Characteristics(0.5C, 25°C)



Different DOD Discharge Cycle Life Curve(0.5C)



Different Temperature Self Discharge Curve



POWERCELL TECHNOLOGY

