

# 12V Lithium Iron Phosphate (LiFePO4)

NO ONE CAN AFFORD TO BE OUTSIDE OF THIS REVOLUTION!

## FW-12-200 (12.8V, 200AH)

### Freedom Won Energy



### Features of LiFePO4 Battery

**Longer cycle life:** A LiFePO4 12V Lithium Battery offers more than 2000 cycles which is approx five times more than a 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 the power of lead acid batteries, even high discharge rate, while maintaining high energy capacity.

**Wider Temperature Range:** -20°C~60°C.

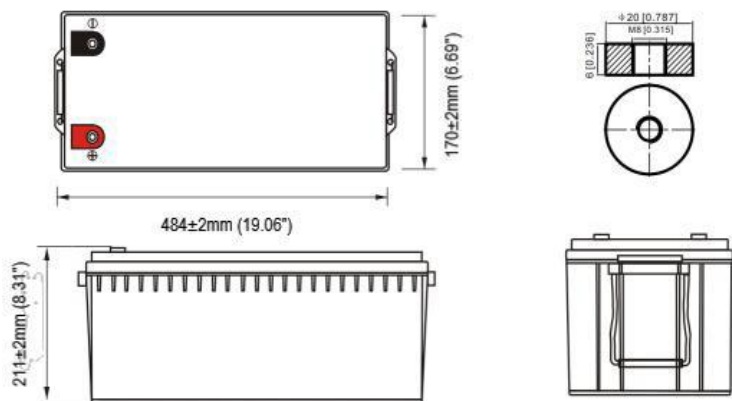
**Super Safety:** Lithium Iron Phosphate Chemistry eliminates the risk of explosion or combustion due to high impact, over charging or short circuit situation.

**Increased Flexibility:** Modular design enables deployment of up to four batteries in series and up to eight batteries in parallel.

### Application

- \* Electric vehicles, electric mobility
- \* Solar/wind energy storage system
- \* UPS, backup Power
- \* Telecommunication
- \* Medical equipment
- \* Lighting

### Physical Dimension



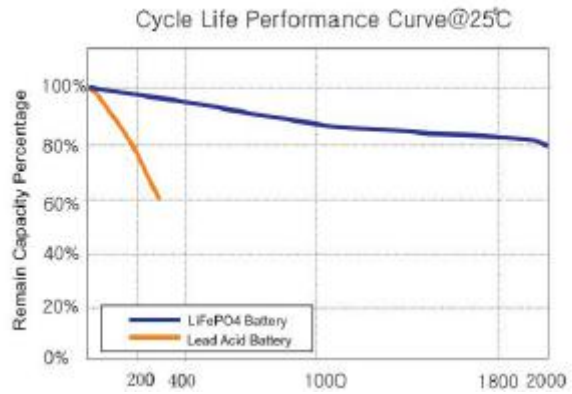
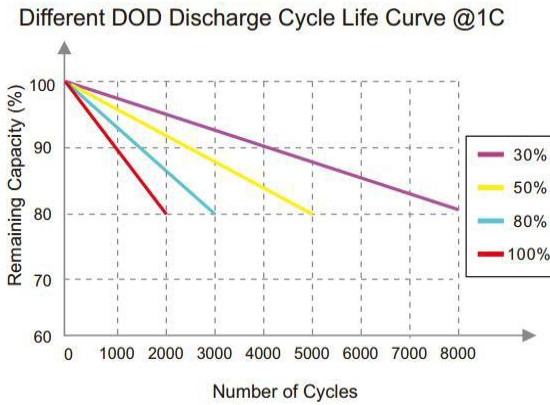
### Specification

Electrical Characteristic	Nominal Voltage	12.8V
	Nominal Capacity	200AH
	Energy	2560Wh
	Internal Resistance	<30mΩ
	Cycle life	>2000 cycles at 0.2C 100% DOD
	Months Self Discharge	<3%
	Efficiency of Charge	100% at 0.5C
Standard Charge	Efficiency of discharge	96~99% at 1C
	Charge volt	14.6±0.2V
	Charge Mode	CC at 0.2C to 14.6V, then at CV14.6V to charge current less than 0.02C
	Standard Charge Current	40A
	Max. Charge current	100A
	Charge cut off voltage	15.6V±0.2V
	Continuous Current	150A

<b>Standard Discharge</b>	Max. Pulse Current	400A (<3s)
	Discharge Cut-off Voltage	8±0.2V
<b>Environment</b>	Charge Temperature	0°C to 45°C (32F to 113F) at 60±25% Relative Humidity
	Discharge Temperature	- 20°C to 60°C (-4F to 140F) at 60±25% Relative Humidity
	Storage Temperature	0°C to 40°C (32F to 104F) 60±25% Relative Humidity
	Water Dust Resistance	IP56
<b>Mechanical</b>	cell type	Prismatic LiFePo4 cell in 4S8P
	Plastic Case	ABS
	Dimensions (in./mm)	484*170*211mm (19.06**6.69**8.31")
	Weight (lbs./kg.)	29.6KG (65.257lbs)
	Terminal	M8

**Cycle Life Curve in Different DOD Discharge at 1C**

**Cycle Life Performance Curve at 25°C**



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