

## LifePO4 LITHIUM ION

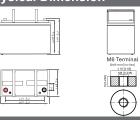
### Lithium Iron Phosphate (LiFePO4) Battery

### 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.
- Increased Flexibility: Modular design enables deployment of up to four batteries in series and up to ten batteries in parallel.



### **Physical Dimension**



### Application

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

### **Specification**

	Nominal Voltage	12.8V
	Nominal Capacity	85Ah (C5,25℃)
	Energy	1088Wh
Electrical	Internal Resistance	≤25mΩ
Characteristics	Cycle Life	>2000 cycles @1C 100%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)
	Charger Current	50A
	Max. Charge Current	85A
	Charge Cut-off Voltage	15.6V±0.2V
Standard Discharge	Continuous Current	85A
	Max. Pulse Current	250A(<3s)
	Discharge Cut-off Voltage	8V
Environmental	Charge Temperature	0 $^{\circ}\mathrm{C}$ to 45 $^{\circ}\mathrm{C}$ (32F to 113F) @60 $\pm$ 25% Relative Humidity
	Discharge Temperature	-20 $^{\circ}$ C to 60 $^{\circ}$ C (-4F to 140F) @60 $\pm$ 25% Relative Humidity
	Storage Temperature	0 $^{\circ}$ C to 40 $^{\circ}$ C (32F to 104F) @60 $\pm$ 25% Relative Humidity
	Water Dust Resistance	IP56
	Cell & Method	26650 4S27P
	Plastic Case	ABS
	Dimensions (mm./in.)	259*168*208 (10.20"*6.61"*8.19")
Mechanical	Weight (kg./lbs.)	9.3kg (20.503lbs)
	Terminal	M6





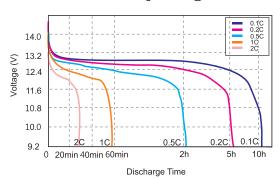


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# Lithium Iron Phosphate (LiFePO4) Battery LFOP12.8V85A/H

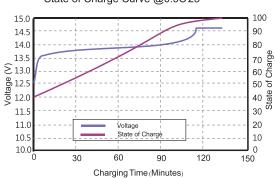
### **Different Rate Discharge Curve**

Different Rate Discharge Curve @25℃



### **State of Charge Curve**

State of Charge Curve @0.5C25



### Cycle Life Curve

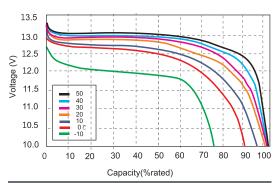
Different DOD Discharge Cycle Life Curve @1C

80 100
90 90
90 0 1000 2000 3000 4000 5000 6000 7000 8000

Number of Cycles

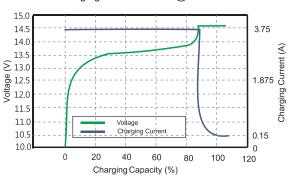
#### **Different Temperature Discharge Curve**

Different Temperature Discharge Curve @0.5C



### **Charging Characteristics**

Charging Characteristics @0.5C 25



### Self Discharge Characteristics Curve

Different Temperature Self Discharge Curve

