# Lithium Iron Phosphate (LiFePO4) Battery

LFP48-50(48V50AH)

# **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 ℃~60 ℃.
- 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.

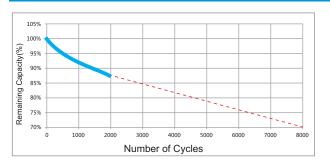


## **Application**

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

#### Lighting

# **Cycle Life Curve**



## **Specification**

	Nominal Voltage	48V
	Nominal Capacity	50Ah (C₅,25°C)
	Energy	2400Wh
Electrical	Internal Resistance	≤200m Ω
Characteristics	Cycle Life	>2500 cycles @0.2C 100%DOD
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.2C
	Efficiency of Discharge	96~99% @1C
Standard Charge	Charge Voltage	54.8±0.2V
	Charge Mode	0.2C to 54.8V, then 54.8,charge current 0.02C(CC/CV)
	Charger Current	20A
	Max. Charge Current	50A
	Charge Cut-off Voltage	55.5V±0.2V
Standard Discharge	Continuous Current	50A
	Max. Pulse Current	100A(<3s)
	Discharge Cut-off Voltage	37.5V
Environmental	Charge Temperature	0 $^{\circ}\mathrm{C}$ to 45 $^{\circ}\mathrm{C}$ (32F to 113F) @60 $\pm$ 25% Relative Humidity
	Discharge Temperature	-20 $^{\circ}\!$
	Storage Temperature	0 $^{\circ}\mathrm{C}$ to 40 $^{\circ}\mathrm{C}$ (32F to 104F) @60 $\pm$ 25% Relative Humidity
	Water Dust Resistance	
Mechanical	Cell & Method	10213245-3.2V50AH-15S1P
	Plastic Case	3U standard case
	Dimensions (in./mm.)	482*350*132 mm
	Weight (lbs./kg.)	20.5Kg
	Terminal	50A through terminal
	Protocol (optional)	RS485
	BMS	15S100A