

# Lithium Iron Phosphate (LiFePO<sub>4</sub>) Battery

## LFELi-1204M (12.8V 4.5Ah)

### Features Of LiFePO<sub>4</sub> 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.

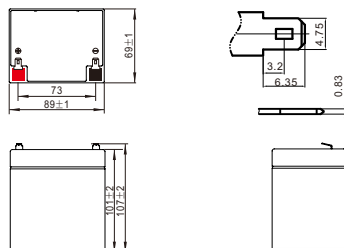
**Higher Power:** Delivers twice power of lead acid battery, even high discharge rate, while maintaining high energy capacity.

**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

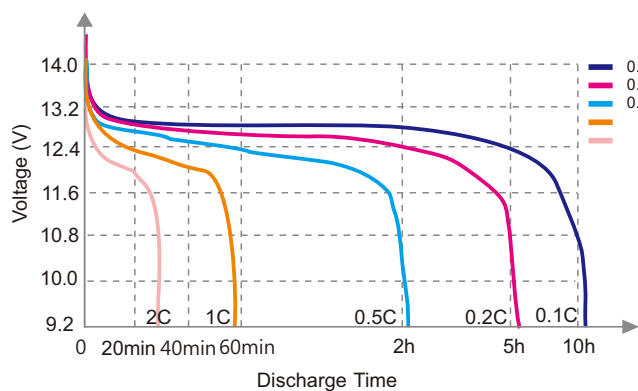
### Specification

Electrical Characteristics	Nominal Voltage	12.8V
	Nominal Capacity	4.5Ah
	Energy	57.6Wh
	Internal Resistance(AC)	≤60mΩ
	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)
	Charge Current	2.5A
	Max. Charge Current	4.5A
	Charge Cut-off Voltage	15.6V±0.2V
Standard Discharge	Continuous Current	12A
	Max. Pulse Current	15A(<3s)
	Discharge Cut-off Voltage	8V
Environmental	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
Mechanical	Plastic Case	ABS
	Approx. Dimensions	89mm*69mm*107mm (3.50in.*2.72in.*4.21in.)
	Approx. Weight	0.85kg (1.87lbs)
	Terminal	T1

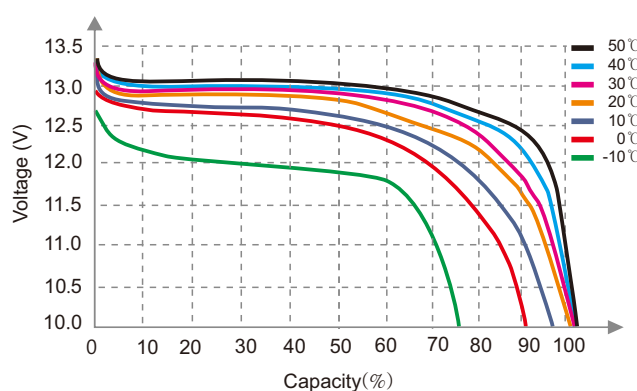
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## LFeLi-1204M (12.8V 4.5Ah)

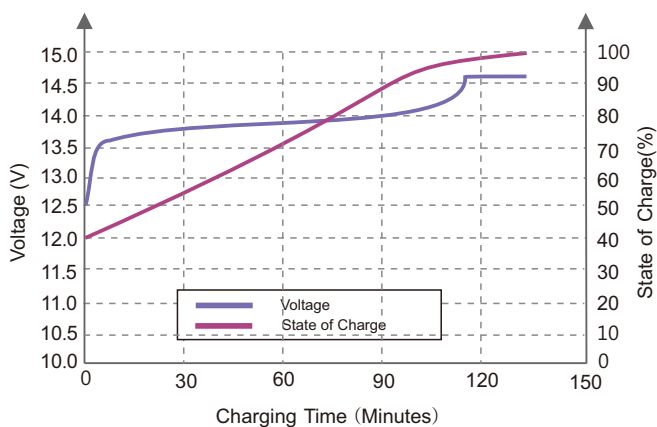
Different Rate Discharge Curve(25°C)



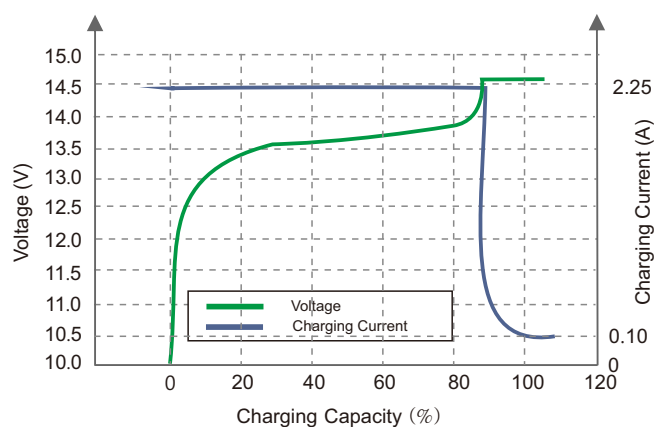
Different Temperature Discharge Curve(0.5C)



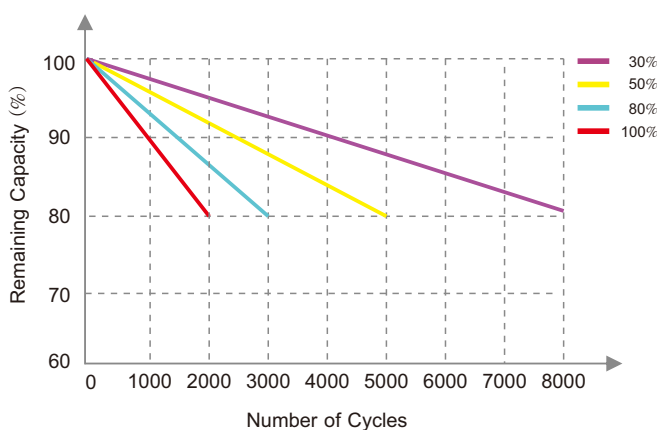
State of Charge Curve(0.5C, 25°C)



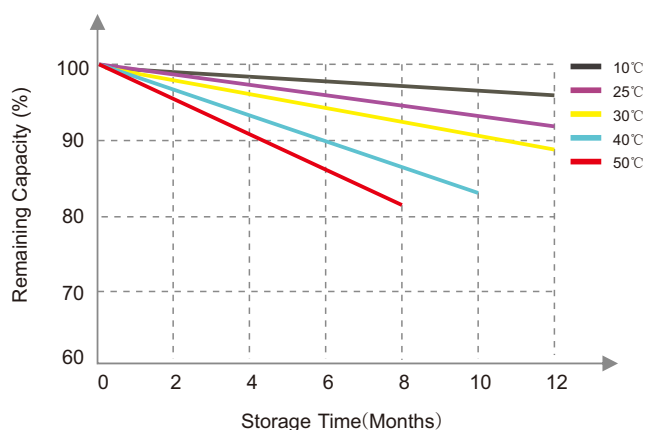
Charging Characteristics(0.5C, 25°C)



Different DOD Discharge Cycle Life Curve(1C)



Different Temperature Self Discharge Curve



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