

# Lith<u>ium Iron Phosphate (LiFePO4) Battery</u> LFeLi-1209M (12.8V9.0Ah)

# 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.

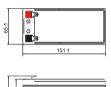
**Lighter Weight:** About 40% of the weight of a comparable lead acid battery. A 'drop in' replacement for lead acid batteries.

**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.











# **Typical Applications**

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

# **Specification**

	Nominal Voltage	12.8V
	Nominal Capacity	9.0Ah
	Energy	115.2Wh
Electrical	Internal Resistance(AC)	≤20mΩ
Characteristics	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	4.5A
	Max. Charge Current	9.0A
	Charge Cut-off Voltage	14.6V±0.2V
Standard Discharge	Rated Discharge Current	4.5A
	Max. Discharge Current	9.0A
	Discharge Cut-off Voltage	10.0V
Environmental	Charge Temperature	0 $^{\circ}$ C to 55 $^{\circ}$ C (32F to 131F) @60 $\pm$ 25% Relative Humidity
	Discharge Temperature	−20 $^{\circ}$ C to 60 $^{\circ}$ C (−4F to 140F) @60 $\pm$ 25% Relative Humidity
	Storage Temperature	$^-$ 20 $^\circ$ C to 40 $^\circ$ C (-4F to 113F) @60 $\pm$ 25% Relative Humidity
	IP Class	IP65
Mechanical	Plastic Case	ABS
	Approx. Dimensions	151mm*65mm*99mm (5.94in.*2.56in.*3.90in.)
	Approx. Weight	1.0kg (2.20lbs)
	Terminal	T2

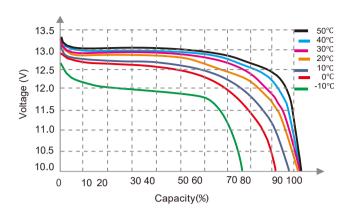


# Lith<u>ium Iron Phosphate (LiFePO4) Battery</u> LFeLi-1209M (12.8V9.0Ah)

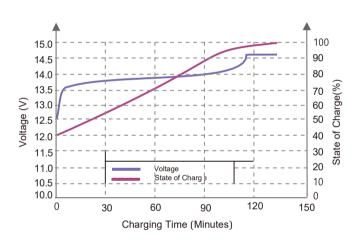
# Different Rate Discharge Curve(25℃)

# 14.0 13.2 12.4 10.5 10.5 10.0 9.2 10.0 1

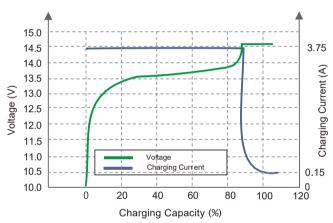
## Different Temperature Discharge Curve(0.5C)



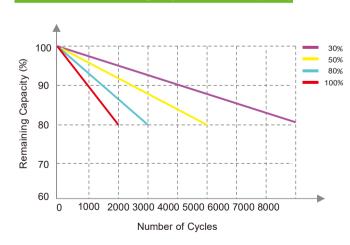
## State of Charge Curve(0.5C, 25°C)



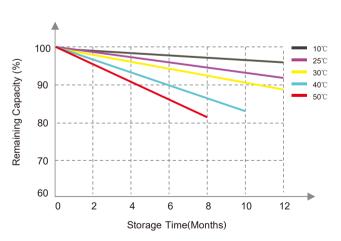
## Charging Characteristics(0.5C, 25℃)



### Different DOD Discharge Cycle Life Curve(0.5C)



## Different Temperature Self Discharge Curve



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