

Lithium Iron Phosphate (LiFePO4) Battery LFeLi-1218M (12.8V18Ah)

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.







Typical Applications

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

Specification

1	
Nominal Voltage	12.8V
Nominal Capacity	18Ah
Energy	230Wh
Internal Resistance(AC)	≤50mΩ
Cycle Life	>2000 cycles @1C 100%DOD
Months Self Discharge	<3%
Efficiency of Charge	100% @0.5C
Efficiency of Discharge	96~99% @1C
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	9A
Max. Charge Current	18A
Charge Cut-off Voltage	15.6V±0.2V
Continuous Current	36A
Max. Pulse Current	50A(<3s)
Discharge Cut-off Voltage	8V
Charge Temperature	0 $^{\circ}\mathrm{C}$ to 55 $^{\circ}\mathrm{C}$ (32F to 131F) $@60\pm25\%$ Relative Humidity
Discharge Temperature	−20 $^{\circ}$ C to 60 $^{\circ}$ C (−4F to 140F) $@60\pm25\%$ Relative Humidity
Storage Temperature IP Class	−20 $^{\circ}$ C to 45 $^{\circ}$ C (-4F to 113F) @60 \pm 25% Relative Humidity
	IP65
Plastic Case	ABS
Mechanical Approx. Dimensions Approx. Weight Terminal	181.5mm*77mm*167.5mm (7.15in.*3.03in.*6.59in.)
	2.70kg (5.96lbs)
	Т3
	Nominal Capacity Energy Internal Resistance(AC) Cycle Life Months Self Discharge Efficiency of Charge Efficiency of Discharge Charge Voltage Charge Mode Charge Current Max. Charge Current Charge Cut-off Voltage Continuous Current Max. Pulse Current Discharge Cut-off Voltage Charge Temperature Discharge Temperature IP Class Plastic Case Approx. Dimensions Approx. Weight

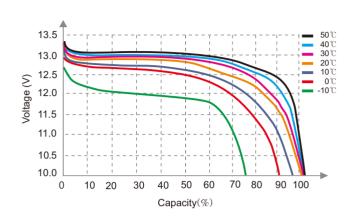


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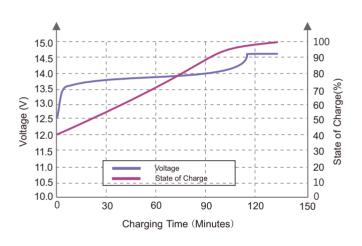
Different Rate Discharge Curve(25℃)

0.1C 0.2C 0.5C 1C 2C 14.0 13.2 Voltage (V) 12.4 11.6 10.8 10.0 0.2C 0.1C 9.2 0 20min 40min 60min 2h 5h 10h Discharge Time

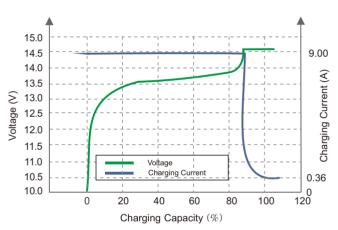
Different Temperature Discharge Curve(0.5C)



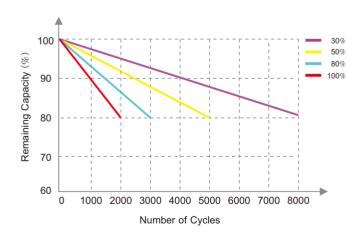
State of Charge Curve(0.5C, 25°C)



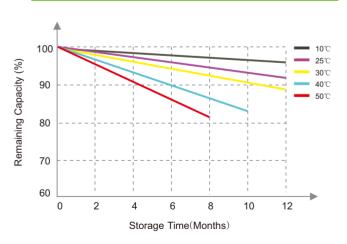
Charging Characteristics (0.5C, 25°C)



Different DOD Discharge Cycle Life Curve(1C)



Different Temperature Self Discharge Curve



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