



**LITHIUM IRON  
BATTERIES**

Model: **SL50-LI**



The world's leading battery brand



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# LITHIUM IRON PHOSPHATE (LiFePO4) BATTERY

Model: **SL50-LI**

## 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.

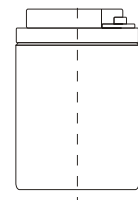
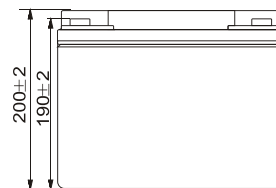
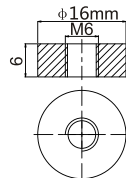
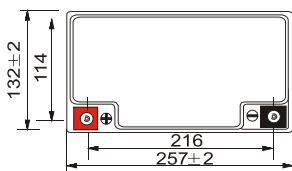
**Superior Safety:** Lithium Iron Phosphate chemistry eliminates the risk of explosion or combustion due to high impact, overcharging or short circuit situation.



## Typical Applications

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

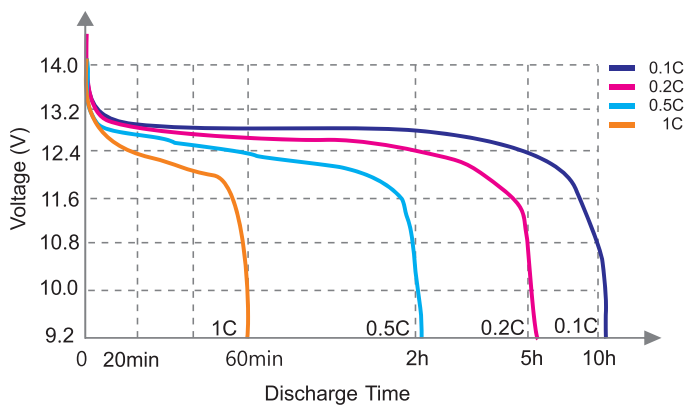
## Physical Dimension-mm



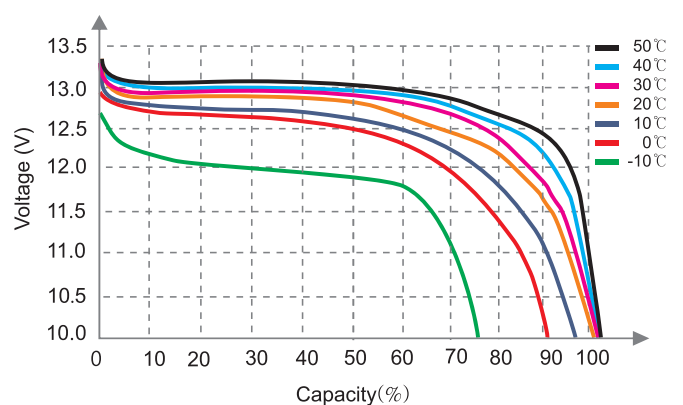
## Specifications

<b>Electrical Characteristics</b>	Nominal Voltage	12.8V
	Nominal Capacity	50.0Ah
	Energy	640Wh
	Internal Resistance(AC)	≤30mΩ
	Cycle Life	>2000 cycles @1C 100%DOD
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.5C
	Efficiency of Discharge	96~99% @1C
<b>Standard Charge</b>	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	25.0A
	Max. Charge Current	50.0A
	Charge Cut-off Voltage	14.6V±0.2V
<b>Standard Discharge</b>	Rated Discharge Current	25.0A
	Max. Discharge Current	50.0A
	Discharge Cut-off Voltage	10.0V
<b>Environmental</b>	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 40°C (-4F to 113F) @60±25% Relative Humidity
	IP Class	IP65
<b>Mechanical</b>	Plastic Case	ABS
	Approx. Dimensions	257mm*132mm*200mm (10.12in.*5.20in.*7.87in.)
	Approx. Weight	7.00kg (15.43lbs)
	Terminal	M6

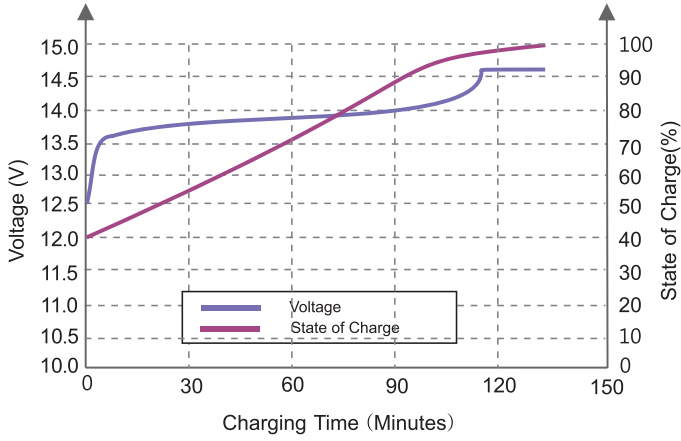
Different Rate Discharge Curve(25°C)



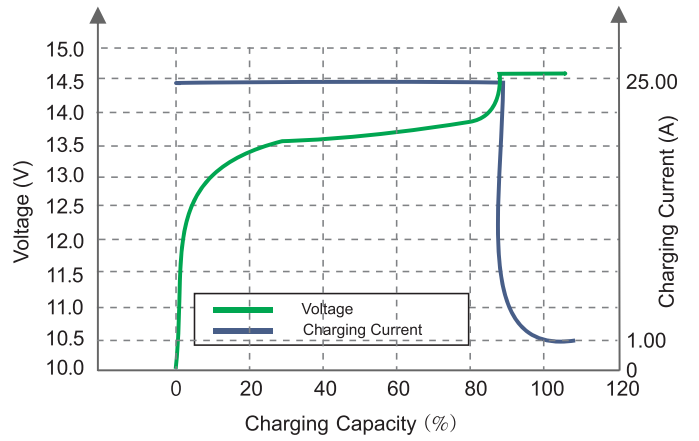
Different Temperature Discharge Curve(0.5C)



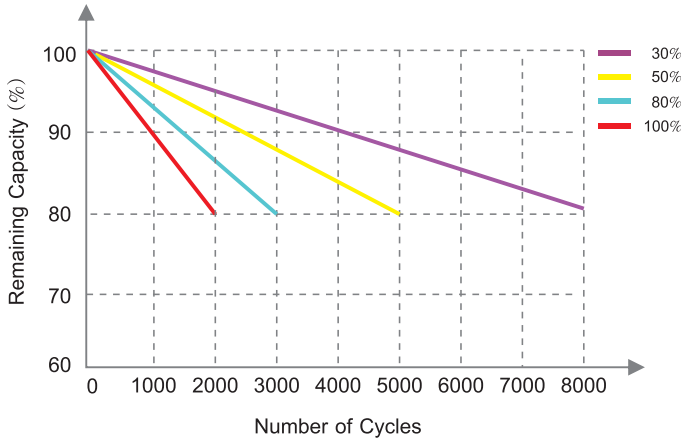
**State of Charge Curve(0.5C, 25°C)**



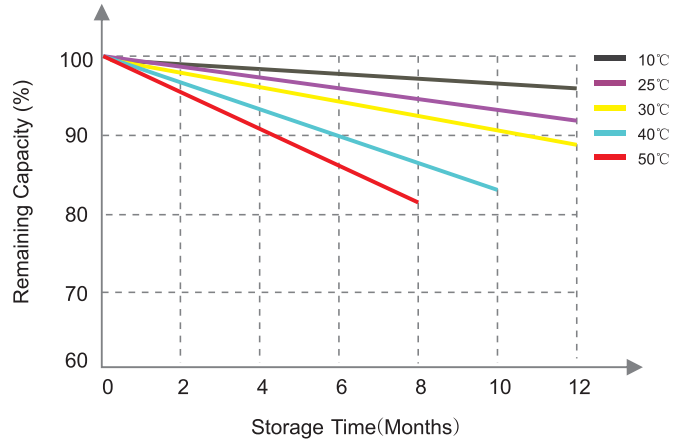
**Charging Characteristics(0.5C, 25°C)**



**Different DOD Discharge Cycle Life Curve(1C)**



**Different Temperature Self Discharge Curve**







**Starmax Corporation**

1585 Cliveden Avenue, Delta, British Columbia  
V3M 6M1, Canada

**Phone:** +1 888 669 1310

**Email:** [info@starmaxbatteries.com](mailto:info@starmaxbatteries.com)

**Website:** [www.starmaxbatteries.com](http://www.starmaxbatteries.com)

