

Lithium Iron Phosphate (LiFePO4) Battery

HL12-18Ah (12.8V18AH/5HR)



Features of LiFePO4 Battery

Longer cycle life: Up to 2000 times longer cycle life and five times longer float/calendar life than lead acid battery, minimize replacement cost and reduce total cost.

Lighter Weight: About 40% of the weight of a comparable lead acid battery.

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

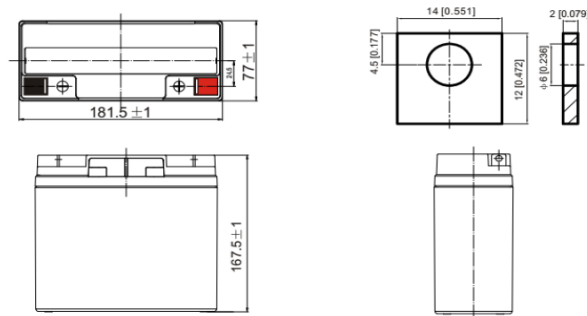
Super Safety: Lithium Iron Phosphate Chemistry eliminates the risk of explosion or combustion due to high impact, over charging or short circuit situation.

Increased Flexibility: Modular design enables deployment of up to four batteries in series and up to four batteries in parallel.

Application:

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

Physical Dimension

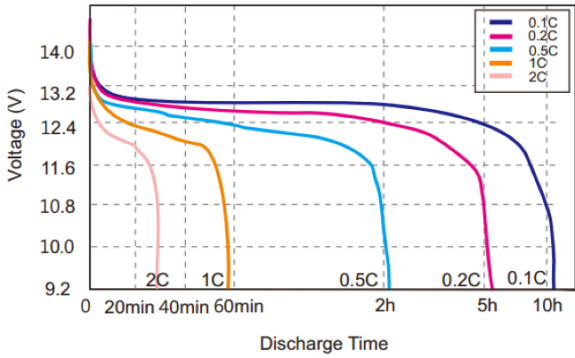


Specification:

Electrical Characteristics	Nominal Voltage	12.8V
	Nominal Capacity	18AH
	Energy	230.4Wh
	Internal Resistance	≪50mΩ
	Cycle life	>2000 cycles at 0.2C 100% DOD at 25°C
	Months Self Discharge	<3%
	Efficiency of Charge	100% at 0.5C
	Efficiency of discharge	96~99% at 1C
Charge	Charge volt	14.6+/-0.2V
	Charge Mode	CC at 0.2C to 14.6V, then at CV14.6V to charge current less than 0.02C
	Standard charge	3.6A
	Quick Charge Current	9A
	Max. Charge current	18A
	Charge cut off voltage	15.6V+/-0.2V
Standard Discharge	Standard discharge current	3.6A
	Quick Discharge current	9A
	Max. Cont. Discharge current	27A
	Max. Pulse Current	50A (<3s)
	Discharge Cut-off Voltage	8V
Environment	Charge Temperature	0°C to 45°C (32F to 113F) at 60±25% Relative Humidity
	Discharge Temperature	- 20°C to 60°C (-4F to 140F) at 60±25% Relative Humidity
	Storage Temperature	0°C to 40°C (32F to 104F) 60±25% Relative Humidity
	Water Dust Resistance	IP56
Mechanical	Cell & method	26650 4S6P
	Plastic Case	ABS
	Dimensions (in./mm)	181*77*167mm(7.13**3.03**6.57")
	Weight (lbs./kg.)	2.7KG (5.958 lbs)
	Terminal	T3

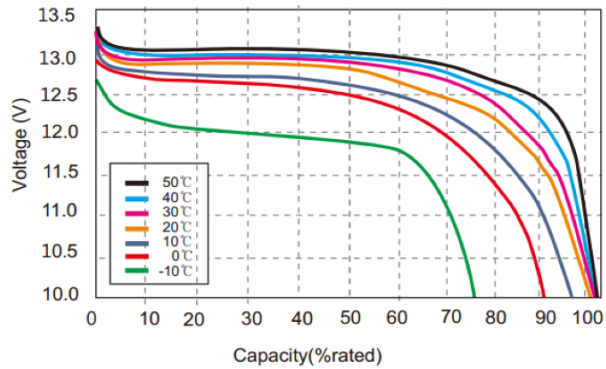
Discharge Curve at different rate at 25°C

Different Rate Discharge Curve @25°C



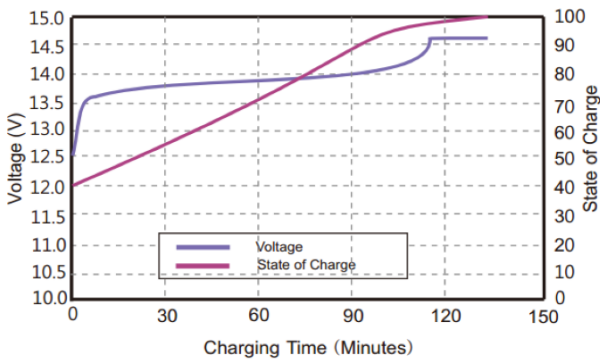
Discharge Curve at different temperature at 0.5C rate

Different Temperature Discharge Curve @0.5C



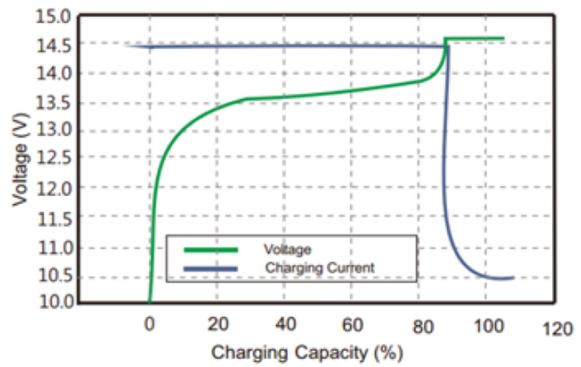
Discharge Curve at different rate at 25°C

State of Charge Curve @0.5C 25°C



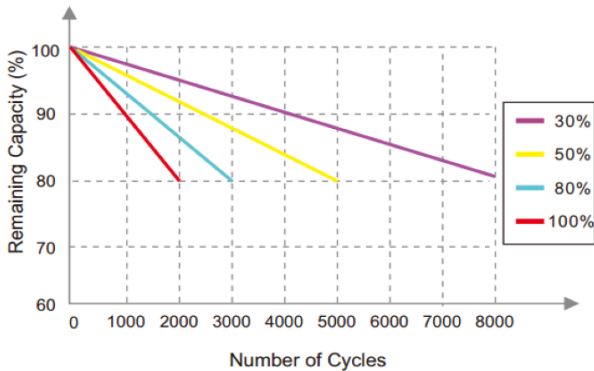
Discharge Curve at different rate at 25°C

Charging Characteristics @0.5C 25°C



Cycle Life Curve in Different DOD Discharge at 1C

Different DOD Discharge Cycle Life Curve @1C



Different Temperature Self Discharge Curve

Different Temperature Self Discharge Curve

