

12.8V-12Ah Lithium Iron Phosphate (LiFePO4) Battery

Features of LiFePO4 Battery

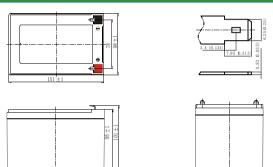
- Longer Cycle Life: Offers up to 20 times longer cycle life and five times longer float/calendar life than lead acid battery, helping to minimize replacement cost and reduce total cost of ownership.
- Lighter Weight: About 40% of the weight of a comparable lead acid battery. A 'drop in' replacement 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.
- Increased Flexibility: Modular design enables deployment of up to four batteries in series and up to ten batteries in parallel.

Application

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



Physical Dimension



Specification

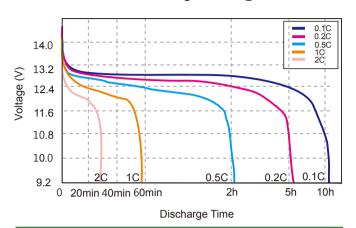
	Nominal Voltage	12.8V
Electrical Characteristics	Nominal Capacity	12Ah
	Energy	153.6Wh
	Internal Resistance	≤65mΩ
	Cycle Life	>2000 cycles @0.2C 100%DOD
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.2C
	Efficiency of Discharge	96~99% @ 6A
Standard Charge	Charge Voltage	14.6± 0.2V
	Charge Mode	0.2C to 14. 6V, then 14. 6V, charge current to 0.02C (CC/CV)
	Charger Current	2.4A
	Max. Charge Current	6A
	Charge Cut-off Voltage	15.6V±0.2V
Standard Discharge	Continuous Current	2.4A
	Max. Pulse Current	6A
	Discharge Cut-off Voltage	8V
Environmental	Charge Temperature	0 $^{\circ}$ to 45 $^{\circ}$ (32F to 113F) @60 \pm 25% Relative Humidity
	Discharge Temperature	-20 $^{\circ}\mathrm{C}$ to 60 $^{\circ}\mathrm{C}$ (-4F to 140F) @60 \pm 25% Relative Humidity
	Storage Temperature	0 $^{\circ}$ to 40 $^{\circ}$ (32F to 104F) @60 \pm 25% Relative Humidity
	Water Dust Resistance	IP65
Mechanical	Cell & Method	32700 4S2P
	Plastic Case	ABS
	Dimensions (in./mm.)	151*98*95mm (5.95"*3.86"*3.74")
	Weight (lbs./kg.)	1.5Kg
	Terminal	F2



12.8V-12Ah Lithium Iron Phosphate (LiFePO4) Battery

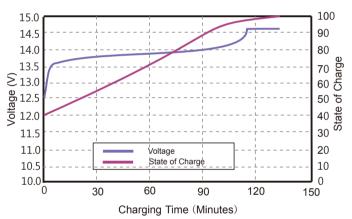
Different Rate Discharge Curve

Different Rate Discharge Curve @25℃



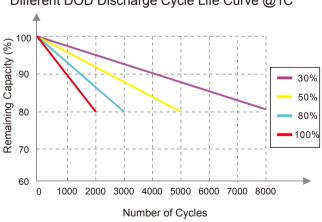
State of Charge Curve

State of Charge Curve @0.5C 25°C



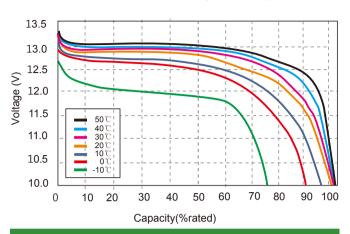
Cycle Life Curve

Different DOD Discharge Cycle Life Curve @1C



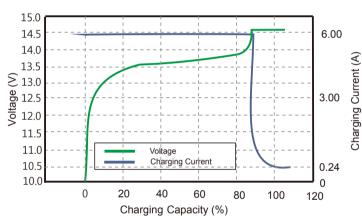
Different Temperature Discharge Curve

Different Temperature Discharge Curve @0.5C



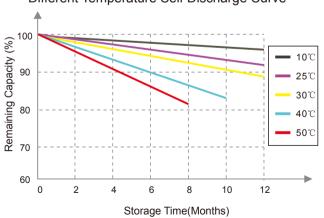
Charging Characteristics

Charging Characteristics @0.5C 25 ℃



Self Discharge Characteristics Curve

Different Temperature Self Discharge Curve



SHENZHEN HIMAX ELECTRONICS CO.,LTD.

Building C, Huaming Industrial Park, Huaming Road, Dalang, Longhua, Shenzhen China 518000 www.himaxelectronics.com