

Lithium Iron Phosphate (LiFePO4) Battery

Cycle Life Curve

SLB51.2-100(51.2V100AH)

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.

LIFF-MARS 100 JAN-10SAM). LIFF-POA Battery Module

Application

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

Specification

	105%	_															1
Remaining Capacity(%)	100%		_		-		-										
	95%				-		_										-
	90%	-					_										-
	85%	_			_												
	80%	-					_										
	75%	-					_						-				
	70%	_					_				_						1
		0	100	10	200		30		40	50	00	60	000	70	00	80	000
	Number of Cycles																

	Nominal Voltage	51.2V					
	Nominal Capacity	100Ah (C₅,25°C)					
	Energy	5120Wh					
Electrical	Internal Resistance	≤500m Ω					
Characteristics	Cycle Life	>5000 cycles @0.2C 80%DOD					
	Months Self Discharge	<3%					
	Efficiency of Charge	100% @0.2C					
	Efficiency of Discharge	96~99% @1C					
	Charge Voltage	58.4±0.2V					
	Charge Mode	0.2C to 58.4V, then 58.4,charge current 0.02C(CC/CV)					
Standard Charge	Charger Current	20A					
	Max. Charge Current	50A					
	Charge Cut-off Voltage	59.2V±0.2V					
	Continuous Current	100A					
Standard Discharge	Max. Pulse Current	150A(<3s)					
	Discharge Cut-off Voltage	37.5V					
	Charge Temperature	0 $^{\circ}\mathrm{C}$ to 45 $^{\circ}\mathrm{C}$ (32F to 113F) @60 \pm 25% Relative Humidity					
Environmental	Discharge Temperature	-20 $^{\circ}\!$					
Environmental	Storage Temperature	0 $^{\circ}$ C to 40 $^{\circ}$ C (32F to 104F) @60 \pm 25% Relative Humidity					
	Water Dust Resistance						
	Cell & Method	13161227-3.2V50AH-16S2P					
	Plastic Case	5U standard case					
	Dimensions (in./mm.)	570*360*140 mm					
Mechanical	Weight (lbs./kg.)	45Kg					
	Terminal	100A through terminal					
	Protocol (optional)	RS485/CAN					
	BMS	16S100A					