

Lithium Iron Phosphate ECO ESS Battery

Features of ECO ESS Battery

LFP51.2-150(51.2V150AH)

51.2V 100Ah

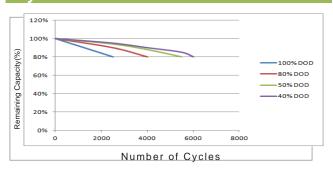
LiFePO₄ Battery Module

- 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 ℃~60 ℃.
- 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.



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

Cycle Life Curve



Specification

Electrical Characteristics	Nominal Voltage	51.2V
	Nominal Capacity	150Ah (C₅,25℃)
	Energy	7680Wh
	Internal Resistance	≤500mΩ
	Cycle Life	>5000 cycles @0.2C 80%DOD
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.2C
	Efficiency of Discharge	96~99% @1C
Standard Charge	Charge Voltage	58.4±0.2V
	Charge Mode	0.2C to 58.4V, then 58.4, charge current 0.02C(CC/CV)
	Charger Current	30A
	Max. Charge Current	75A
	Charge Cut-off Voltage	59.2V±0.2V
Standard Discharge	Continuous Current	100A
	Max. Pulse Current	300A (<3s)
	Discharge Cut-off Voltage	37.5V
Environmental	Charge Temperature	0 $^{\circ}$ C to 45 $^{\circ}$ C (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	$0~^{\circ}\mathrm{C}~$ to $40~^{\circ}\mathrm{C}~$ (32F to 104F) @ $60\pm25\%$ Relative Humidity
	Water Dust Resistance	
Mechanical	Cell & Method	13161227-3.2V50AH-16S3P
	Plastic Case	6U standard case
	Dimensions (in./mm.)	482*500*270 mm
	Weight (lbs./kg.)	65Kg (Approx.)
	Terminal	100A through terminal
	Protocol (optional)	RS485/CAN
	BMS	16S100A



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