



# Lithium Iron Phosphate ECO ESS Battery

## LFP51.2-250(51.2V250AH)

### Features of ECO ESS Battery

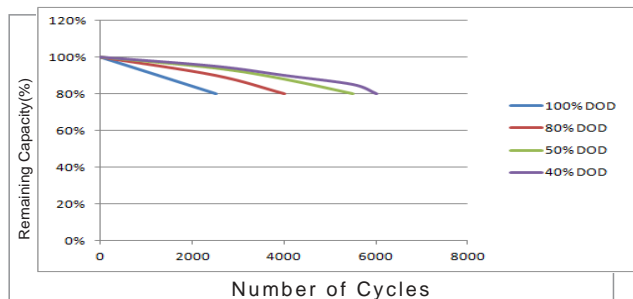
- **Longer Cycle Life:** Offers up to 20 times longer cycle life and five times longer float/calendar life than lead acid battery, helping to minimize replacement cost and reduce total cost of ownership.
- **Lighter Weight:** About 40% of the weight of a comparable lead acid battery. A 'drop in' replacement 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

### Cycle Life Curve



### Specification

<b>Electrical Characteristics</b>	Nominal Voltage	<b>51.2V</b>
	Nominal Capacity	250Ah (C <sub>5</sub> ,25°C)
	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
<b>Standard Charge</b>	Charge Voltage	58.4±0.2V
	Charge Mode	0.2C to 58.4V, then 58.4, charge current 0.02C(CC/CV)
	Charger Current	50A
	Max. Charge Current	125A
	Charge Cut-off Voltage	59.2V±0.2V
<b>Standard Discharge</b>	Continuous Current	100A
	Max. Pulse Current	500A (<3s)
	Discharge Cut-off Voltage	37.5V
<b>Environmental</b>	Charge Temperature	0 °C to 45 °C (32F to 113F) @60±25% Relative Humidity
	Discharge Temperature	-20 °C to 60 °C (-4F to 140F) @60±25% Relative Humidity
	Storage Temperature	0 °C to 40 °C (32F to 104F) @60±25% Relative Humidity
	Water Dust Resistance	
<b>Mechanical</b>	Cell & Method	13161227-3.2V50AH-16S5P
	Plastic Case	6U standard case
	Dimensions (in./mm.)	482*570*270 mm
	Weight (lbs./kg.)	97Kg (Approx.)
	Terminal	100A through terminal
	Protocol (optional)	RS485/CAN
	BMS	16S100A

