



Lithium Iron Phosphate ECO ESS Battery

LFP51.2-100(51.2V100AH)

Features of ECO ESS Battery

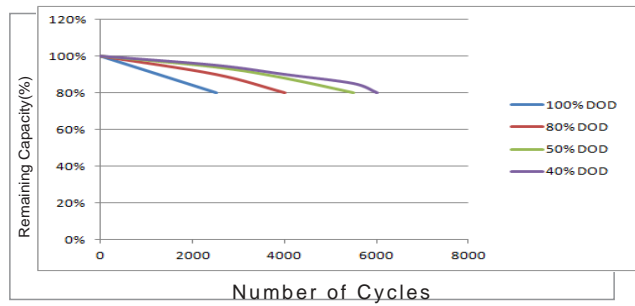
- **Longer Cycle Life:** Offers up to 20 times longer cycle life and five times longer float/calendar life than lead acid battery, helping to minimize replacement cost and reduce total cost of ownership.
- **Lighter Weight:** About 40% of the weight of a comparable lead acid battery. A 'drop in' replacement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

Electrical Characteristics	Nominal Voltage	51.2V
	Nominal Capacity	100Ah (C ₅ ,25°C)
	Energy	5120Wh
	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	20A
	Max. Charge Current	50A
	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 °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	
Mechanical	Cell & Method	13161227-3.2V50AH-16S2P
	Plastic Case	5U standard case
	Dimensions (in./mm.)	482*430*222 mm
	Weight (lbs./kg.)	47Kg (Approx.)
	Terminal	100A through terminal
	Protocol (optional)	RS485/CAN
	BMS	16S100A

