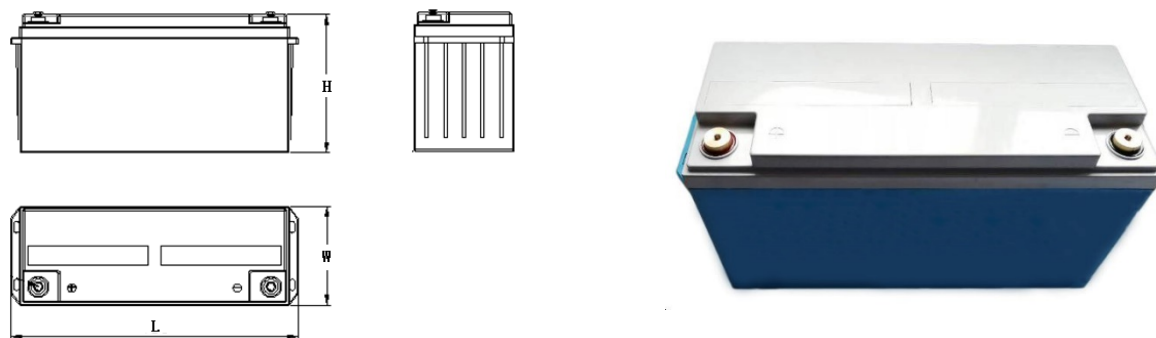


# Lithium Iron Phosphate (LiFePO<sub>4</sub>) Battery 12.8 V – 243.2 Ah LX12-243HE1

## 1. Features of LiFePO<sub>4</sub> Battery

- ✓ **Reliable quality:** We focus on the various parts of production, from suppliers' selection to the production of phosphate material, lithium battery cell production and assembly of battery packs, to make sure the traceability of the products.
- ✓ **Long cycle time:** Provide 10 times longer cycle life than lead acid battery. Help to minimize replacement cost and reduce total cost of ownership.
- ✓ **Higher power:** Deliver twice power with higher discharge rate compared with lead acid battery. It also can sustain higher charge current and limit the charge time.
- ✓ **Lighter weight:** It's only 50% of the lead-acid batter weight. A drop in replacement for lead acid battery. Wider temperature range: **-20 °C-60 °C**.
- ✓ **Super safety:** Lithium Iron phosphate chemistry eliminates the risk of explosion or combustion due to high impact, overcharged or short circuit situation.
- ✓ **Environment friendly:** Lithium battery materials do not have any poisonous and harmful substances whether in production or in use. Now it has been widely accepted by more and more countries.

## 2. Physical Dimension-mm

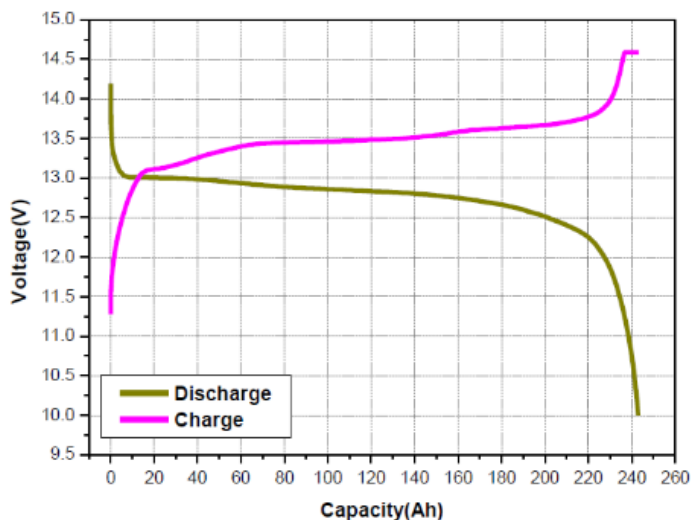


### 3. Specification

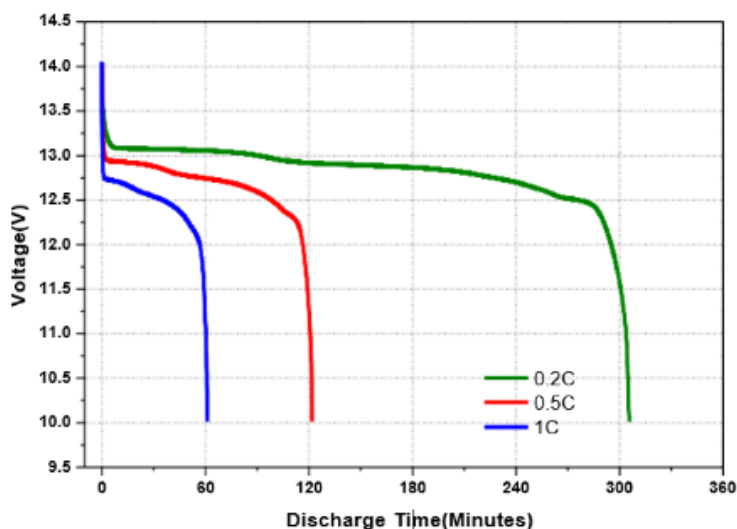
Product Reference	LX12-243HE1	
<b>Electrical Characteristics</b>	Normal Voltage	12.8 V
	Rated Capacity	243.2±8 Ah (0.2C)
	Energy	About 3112.96 Wh
	Internal Resistance	≤35 mΩ
	Cycle Life	≥1, 600@0.2C (100%DOD)
		≥3, 200@0.2C (80%DOD)
≥5, 600@0.2C (50%DOD)		
Passive Protection Function	Over charge protection, Over discharge protection, Temperature protection, Balanced function	
<b>Standard Charge</b>	Charge Voltage	14.4±0.15 V
	Charge Mode	0.2 C to 14.4 V, then 14.4 V, charge current to 0.01C (CC/CV)
	Charge Current	25 A
	Max. Charge Current	50 A
<b>Standard Discharge</b>	Continuous Current	80 A
	Max Continuous Current	≤100 A
	Max. Pulse Current	100-500 A (≤20 ms)
	Discharge Cut-off Voltage	About 10.0 V
<b>Environmental</b>	Charge Temperature	0 °C to 45 °C
	Discharge Temperature	-20 °C to 60 °C
	Storage Temperature	0 °C to 40 °C
<b>Mechanical</b>	Material System	LiFePO4
	Material of Case	Plastic
	L (mm) ×W (mm) × H (mm)	(483±3) × (170±2) × (235±2)
	Weight	26.5±0.5 kg
	Terminal	M8
<p><b>Please note that: the above are our regular parameters, which can be customized according to actual requirements. Please consult our technical engineers for details.</b></p>		

Please note that: in the following curves, if the testing current is bigger than this current, please remove the PCB and match suitable wires.

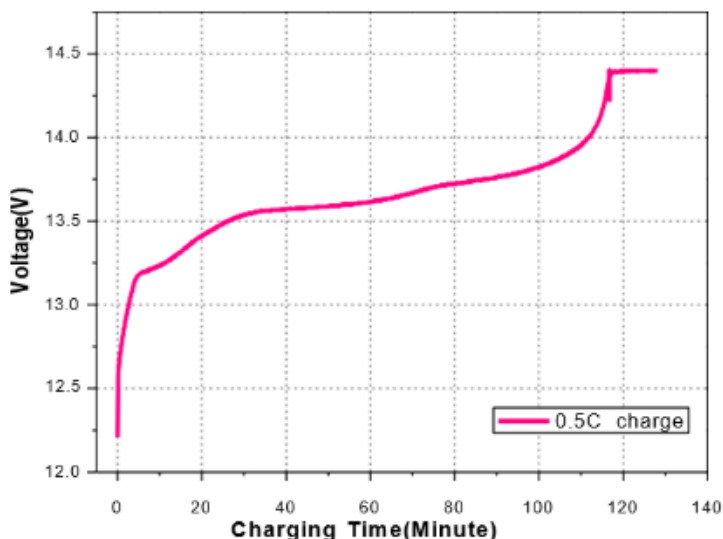
**12.8 V – 243.2 Ah  
Charge-Discharge Curve 0.2 C, 25 °C**



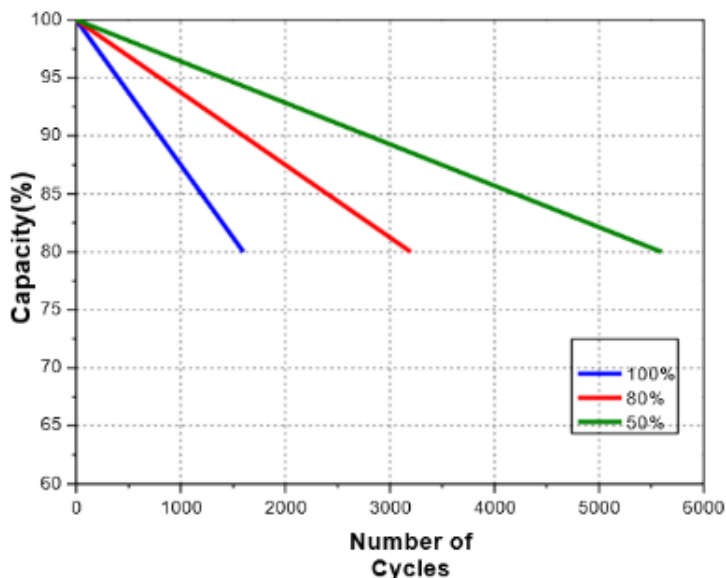
**Different Rate Discharge Time & Voltage Curve, 25 °C**



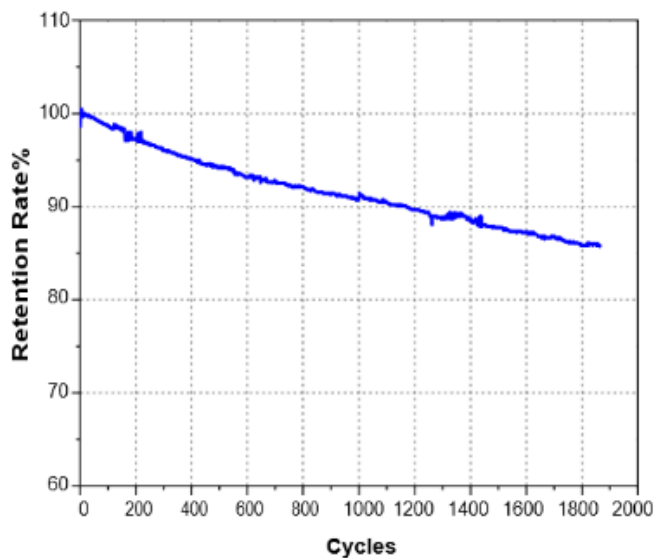
**Voltage & Charging Time Curve,  
0.5 C, 25 °C**



**Different DOD Discharge Cycle Life Curve**



**Cycles & Capacity Retention Rate,  
0.2 °C**



**Discharge Curves at Different  
Temperature**

