$LiFePO_4$ Lithium Battery



Longer Cycle Life: Offers up to 15 times longer cycle life and 5 times longer float/calendar life than lead acid battery.

Lighter Weight: About 40% weight of a comparable lead acid battery, save up to 60% in weight.

Quick Charge: Short charge time compared with lead acid battery.

Low Self-Discharge: Lower self-discharge compared with lead acid battery, longer storage time without recharging.

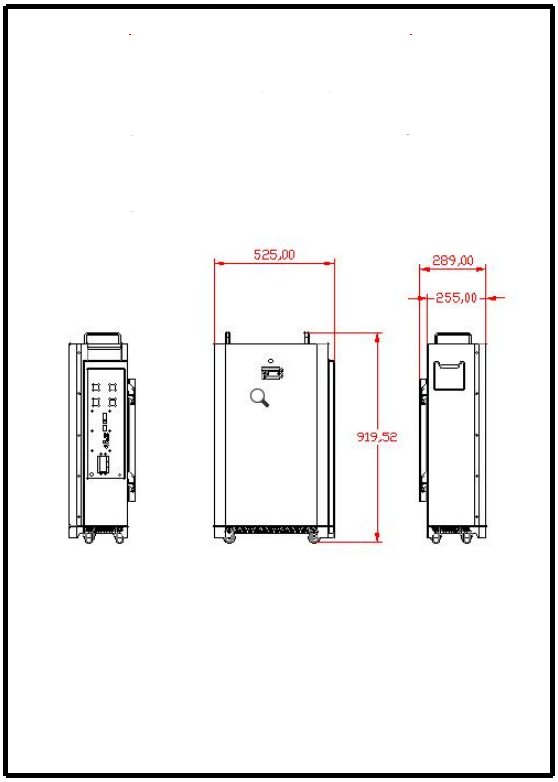
Superior Safety: Multi-protection methods built inside to protect the battery from overcharge, over discharge and short circuit situation.

High Efficient: Higher round-trip energy efficiency of the average (92%) than lead acid battery 80% (discharge from 100% to 0% and back to 100% charged).

O Specifications

Nominal voltage		51.2V
Nominal capacity		300Ah
Dimensions	Length	919.52±2mm (36.2inch)
	Width	525±2mm (20.67inch)
	Height	255±2mm (10.04inch)
	Total height	289±2mm (11.38inch)
Approx. weight		125kg (275.57lbs)±2.5kg

● Outer dimensions (mm)



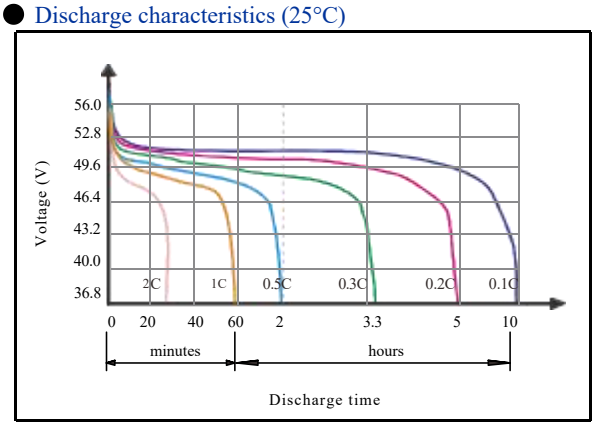
● Characteristics

Electrical Parameters (25°C)	Rated Voltage	51.2V
	Rated Capacity (C_5)	300Ah@25°C
	Energy	15360Wh
	Months Self Discharge	<3%
	Charge Efficiency	99.5%@ 0.2C
	Discharge Efficiency	96-99%@ 1C
Terminal Diameter		M8
Internal resistance (Fully charged, 25°C)		≤30mΩ
Cycle life		>6000 cycles @ 0.2C 80%D.O.D
Capacity affected by temperature	40°C	101%
	25°C	100%
	0°C	90%
	-10°C	75%
Nominal operating temperature		25°C± 3°C (77°F± 5°F)
Operating temperature range	Discharge	- 20°C~ 60°C (-4°F ~ 140°F)
	Charge	0°C~ 45°C (32°F ~ 113°F)
	Storage	0°C~ 40°C (32°F ~ 104°F)
Water Dust Resistance		IP54
Charge Voltage		58.4V
Standard Charge Mode (25°C±2°C, <75%RH)		0.2CA Constant Current to 58.4V, then Constant Voltage 58.4V until the current drops to 0.02CA, before use, rest 30 minutes
Charge Current		80A
Maximum Charge Current		200A
Charge Cut off Voltage		58.4V
Continuous Discharge Current		200A
Maximum Pulse Current		300A (<500us)
Discharge Cut Off Voltage		43.2V
Communicate Protocol (optional)		RS485
SOC (optional)		LED/PC Software
Optional add-on features		Bluetooth/Heating
Mechanical	Cells	16 Strings
	Container	Metal

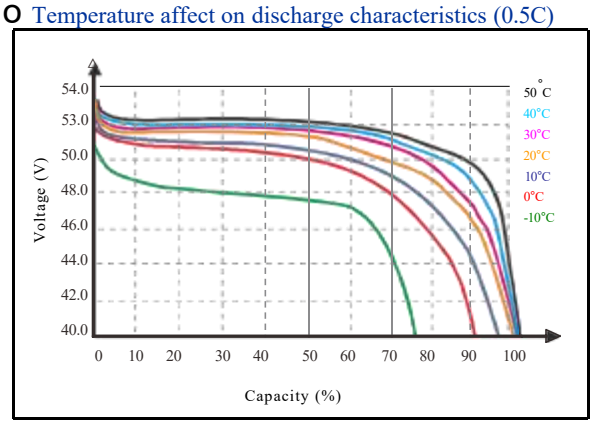
Note 1: Please always refer to the latest edition of our technical manual that published on our website to ensure safe and efficient operation.

XD Battery

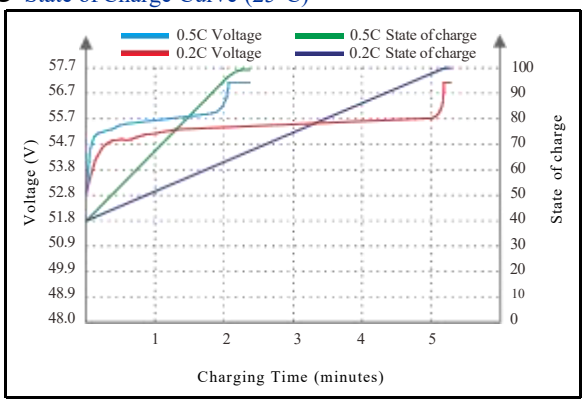
● Discharge characteristics (25°C)



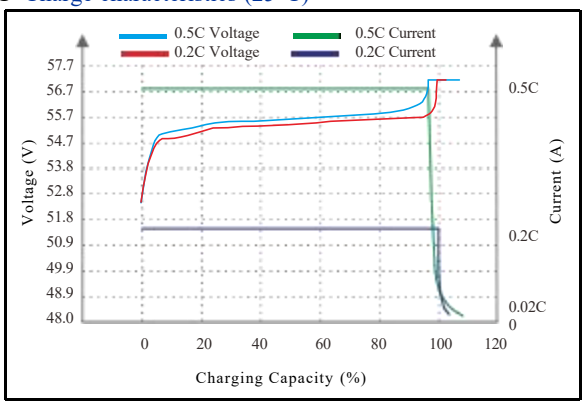
O Temperature affect on discharge characteristics (0.5C)



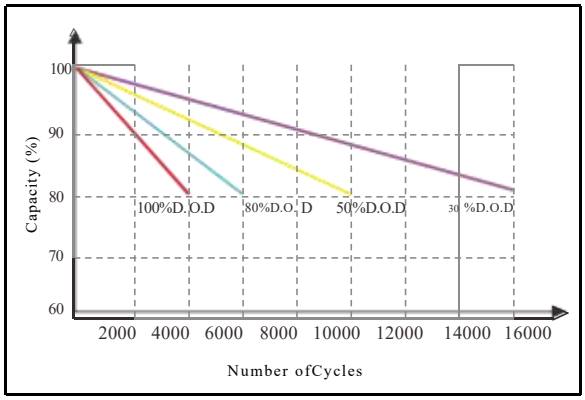
O State of Charge Curve (25°C)



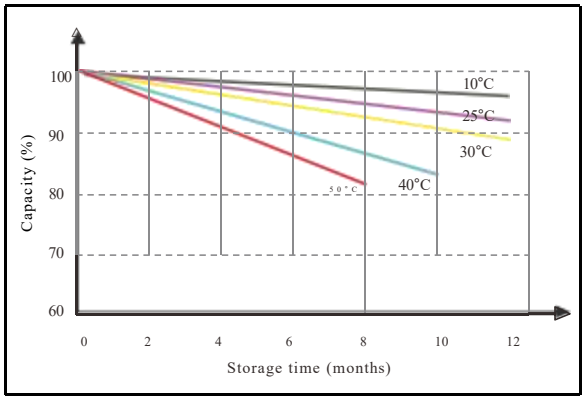
O Charge characteristics (25°C)



● Cycle life on D.O.D (25°C)



● Self Discharge Characteristics Curve



Note 2: The above curves are based on laboratory testing data @ 25°C 40%RH.