

## LiFePO<sub>4</sub> Lithium Battery

**3-Tiered Fire-proof Protection:** Built on a 3-tiered safety system—from cell-level active protection, physical and electrical isolation, to automatic fire suppression. It effectively mitigates LiFePO<sub>4</sub> battery thermal runaway risks and secure household safety.

**IP65 Waterproof Rating:** IP65 ingress protection provides full dust-tightness and resistance to low-pressure water jets. Ideal for outdoor installation, significantly expanding the battery's application scenarios.

**Low-temperature Heating Protection:** Integrated heating film intelligently, it automatically activates when temp drops below 0°C and shuts off at 5–10°C. Enables stable charge/discharge in -20°C to 5°C low-temp environments, suitable for outdoor use in cold regions.

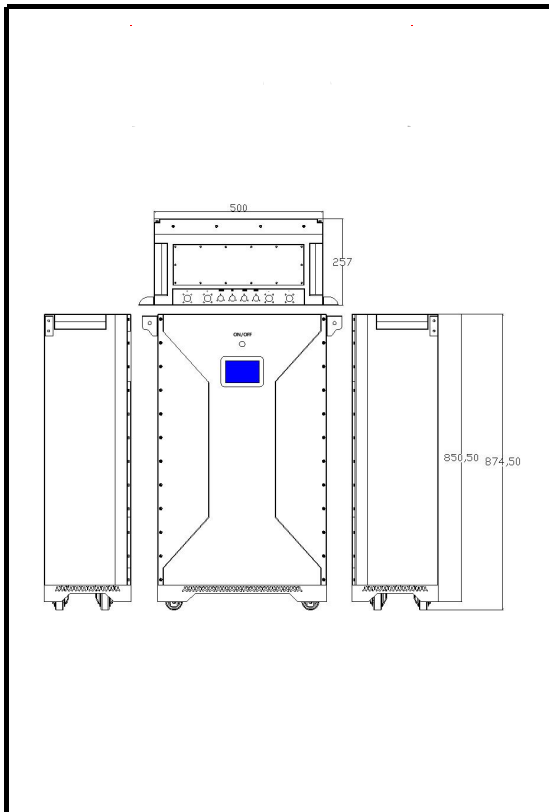
**Active Balancing Protection:** Equipped with DC-DC energy transfer technology. Automatically adjusts cell voltage differences during charging, discharging and standby modes with a balancing current of 2A. Prevents cell imbalance, extending battery cycle life and system stability.



### Specifications

Nominal voltage		51.2V
Nominal capacity		320Ah
Dimensions	Length	874.5±2mm (34.43inch)
	Width	500±2mm (19.68inch)
	Height	257±2mm (10.11inch)
Approx. weight		125kg (275.57lbs)±2.5kg

### Outer dimensions (mm)

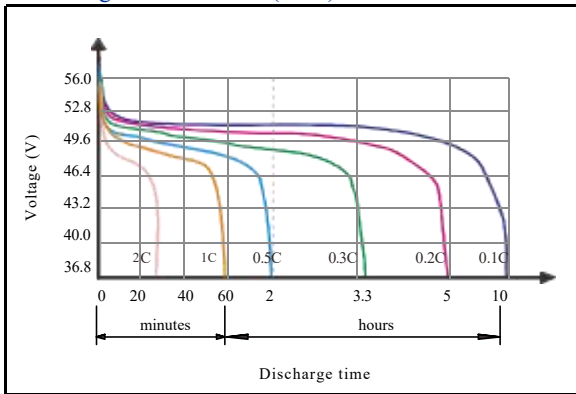


### Characteristics

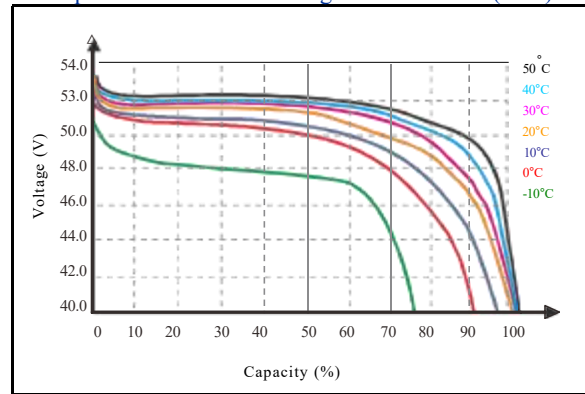
Electrical Parameters (25°C)	Rated Voltage	51.2V
	Rated Capacity (Cs)	320Ah@25°C
	Energy	16384Wh
	Months Self Discharge	<3%
	Charge Efficiency	99.5%@ 0.2C
	Discharge Efficiency	96-99%@ 1C
Terminal Diameter		M8
Internal resistance (Fully charged, 25°C)		≤30mΩ
Cycle life		>6000 cycles @ 0.2C 80%D.O.D
Capacity 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		IP65
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/CAN
SOC (optional)		LED/PC Software
Add-on features		Heating/Fire-proof/Active balancing
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.

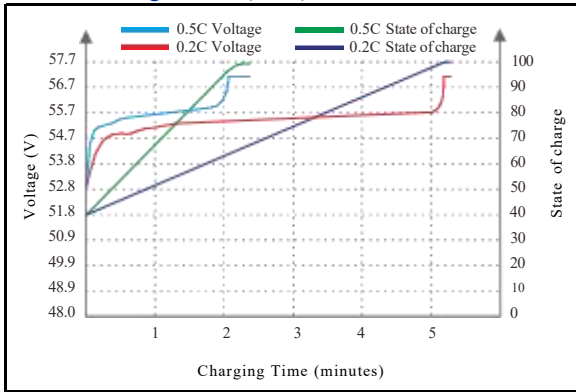
### ● Discharge characteristics (25°C)



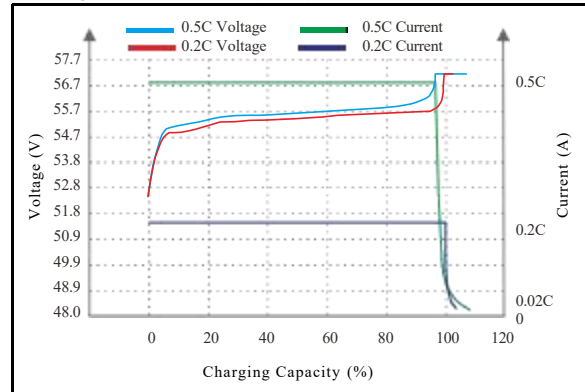
### ● Temperature affect on discharge characteristics (0.5C)



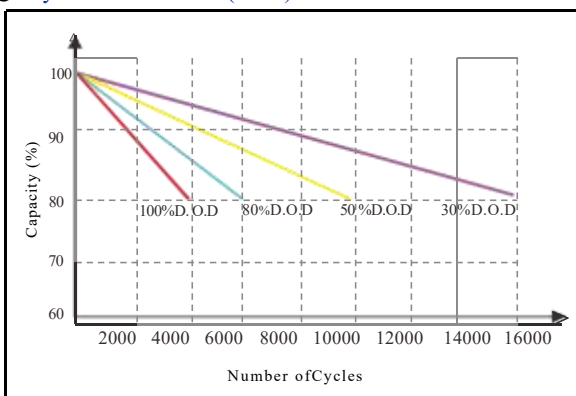
### ● State of Charge Curve (25°C)



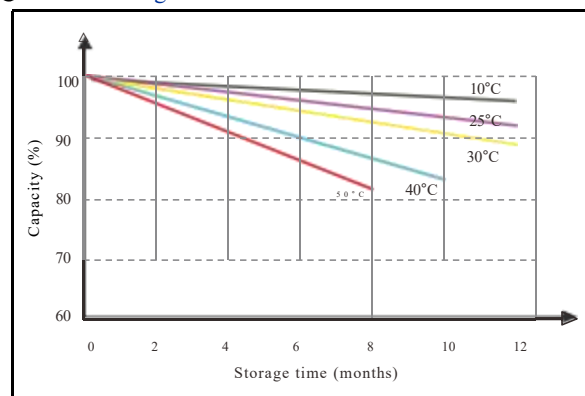
### ● Charge characteristics (25°C)



### ● 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.