

## NSFL050J10 192V50Ah

### LiFePO<sub>4</sub> 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.

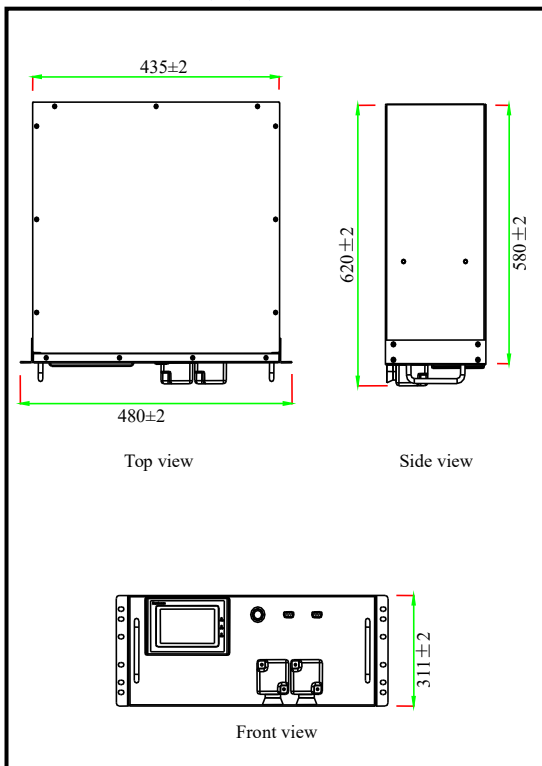
**High Efficient:** Higher round-trip energy efficiency of the average (92%) than lead acid battery 80% (discharge from 100% to 0% and back to 100% charged).



#### Specifications

Nominal voltage		192V
Nominal capacity		50Ah
Dimensions	Length	620±2mm (24.41inch)
	Width	480±2mm (18.89inch)
	Height	311±2mm (12.24inch)
	Total height	311±2mm (12.24inch)
Approx. weight		91kg (200.62lbs)±2.5kg

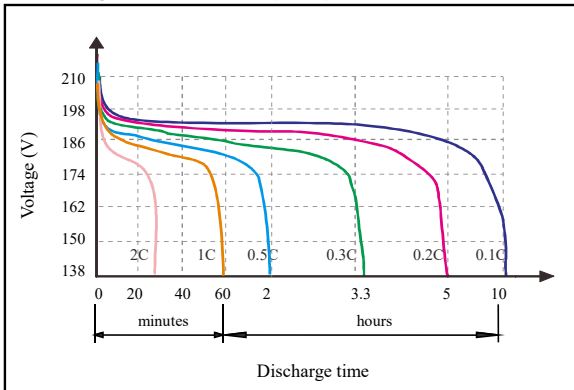
#### Outer dimensions (mm)



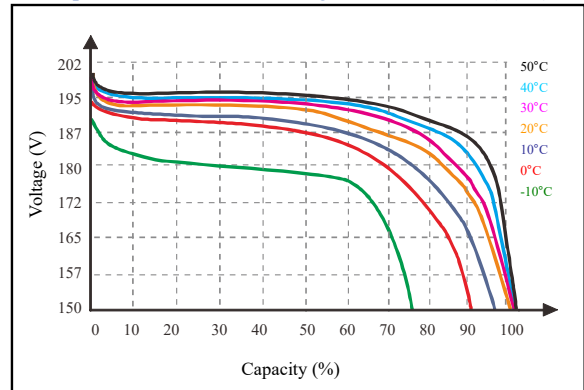
#### Characteristics

Electrical Parameters (25°C)	Rated Voltage	192V
	Rated Capacity (C <sub>5</sub> )	50Ah@25°C
	Energy	9600Wh
	Months Self Discharge	<3%
	Charge Efficiency	99.5%@ 0.2C
	Discharge Efficiency	96-99%@ 1C
Terminal Diameter		M8
Internal resistance (Fully charged, 25°C)		≤300mΩ
Cycle life		>3000 cycles @ 0.2C 100%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		IP50
Charge Voltage		216V
Standard Charge Mode (25°C±2°C, <75%RH)		0.2CA Constant Current to 216V, then Constant Voltage 216V until the current drops to 0.02CA, before use, rest 30 minutes
Charge Current		10A
Maximum Charge Current		25A
Charge Cut off Voltage		219V
Continuous Discharge Current		50A
Maximum Pulse Current		150A (<10s)
Discharge Cut Off Voltage		180V
Communicate Protocol (optional)		RS485/RS232
SOC (optional)		LED/PC Software/Screen
Application connection		1 string 1 parallel
Mechanical	Cells	60 Strings
	Container	Metal

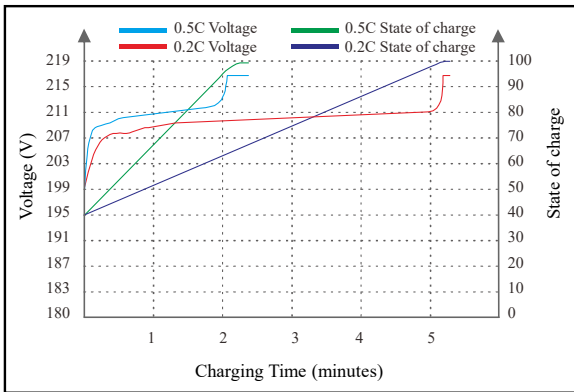
### ● Discharge characteristics (25°C)



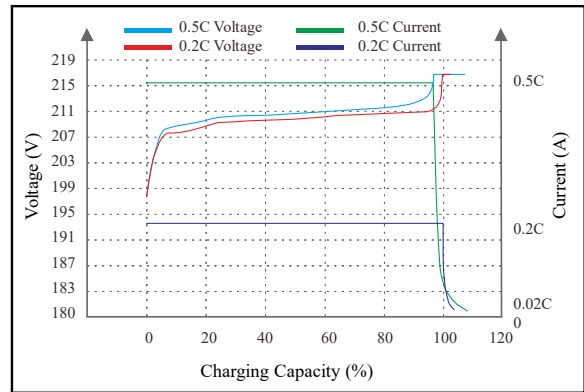
### ● Temperature affect on discharge characteristics (0.5C)



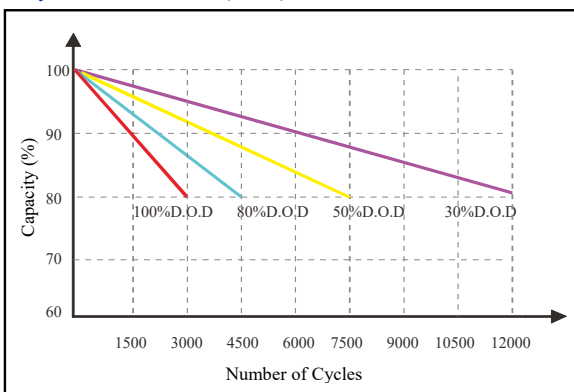
### ● State of Charge Curve (25°C)



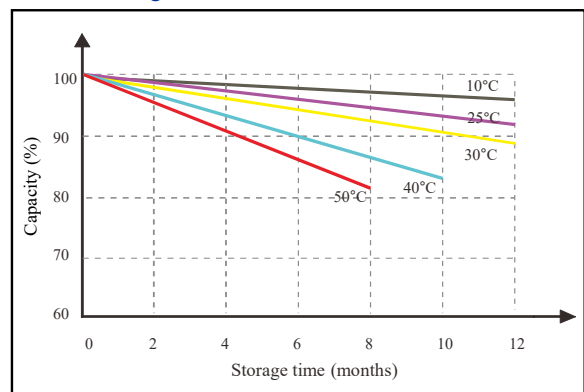
### ● Charge characteristics (25°C)



### ● 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.