

NSFN040J10 384V40Ah

LiFePO₄ 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).



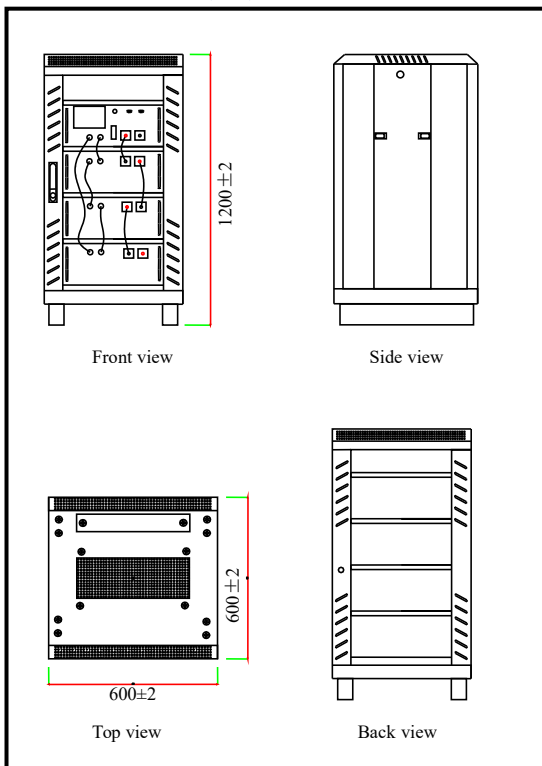
Specifications

Nominal voltage		384V
Nominal capacity		40Ah
Dimensions	Length	600±2mm (23.62inch)
	Width	600±2mm (23.62inch)
	Height	1200±2mm (47.24inch)
	Total height	1200±2mm (47.24inch)
Approx. weight		197.5kg (435.41lbs)±5kg

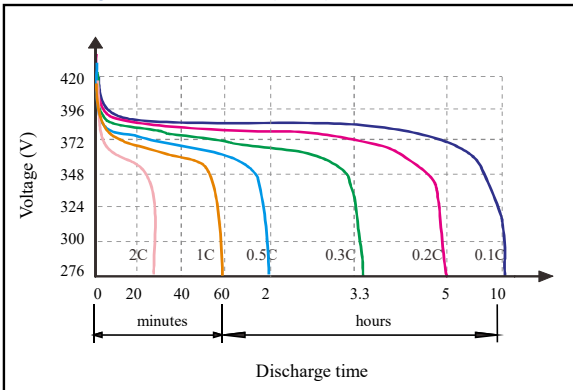
Characteristics

Electrical Parameters (25°C)	Rated Voltage	384V
	Rated Capacity (C ₅)	40Ah@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)		≤290mΩ
Cycle life		>2000 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		432V
Standard Charge Mode (25°C±2°C, <75%RH)		0.2CA Constant Current to 432V, then Constant Voltage 432V until the current drops to 0.02CA, before use, rest 30 minutes
Charge Current		8A
Maximum Charge Current		20A
Charge Cut off Voltage		432V
Continuous Discharge Current		40A
Maximum Pulse Current		120A (<100ms)
Discharge Cut Off Voltage		360V
Communicate Protocol (optional)		RS485/RS232
SOC (optional)		LED/PC Software
Application connection		1 string 1 parallel
Mechanical	Cells	120 Strings
	Container	Metal

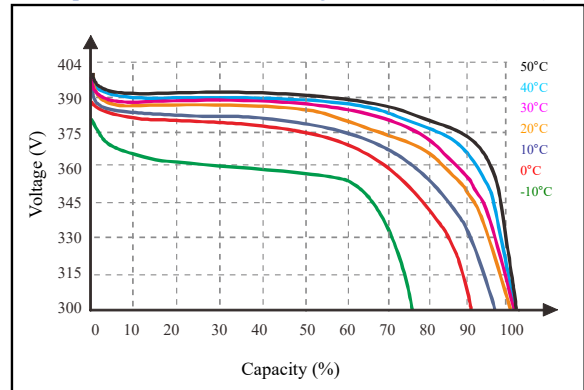
Outer dimensions (mm)



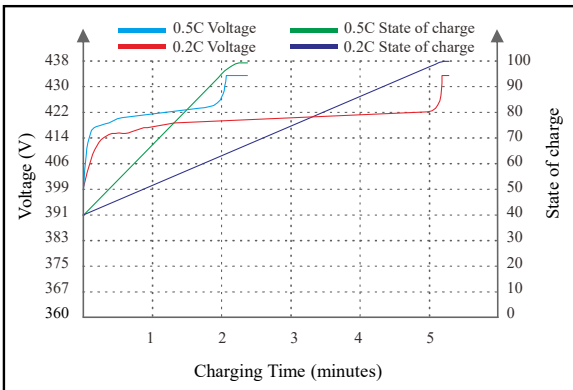
● Discharge characteristics (25°C)



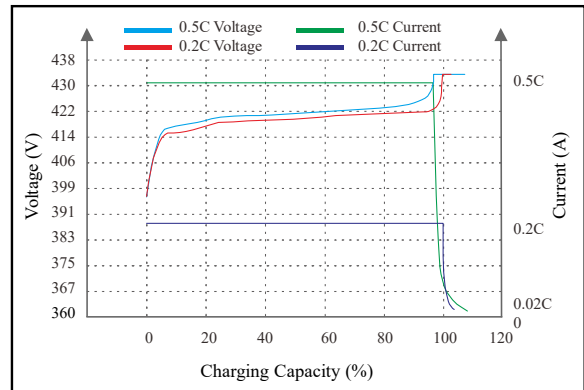
● Temperature affect on discharge characteristics (0.5C)



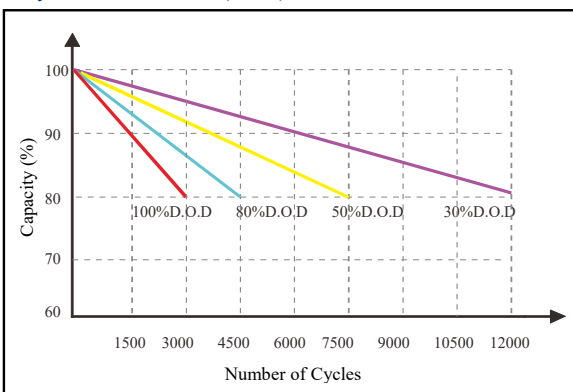
● State of Charge Curve (25°C)



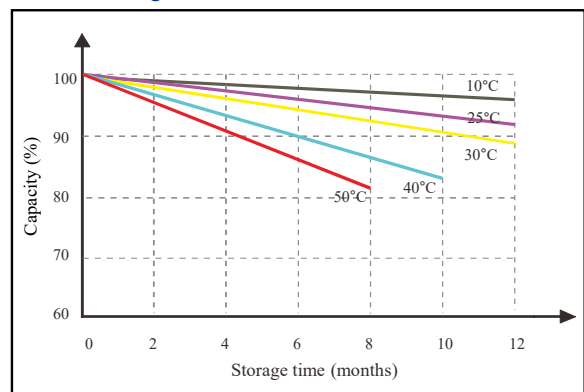
● Charge characteristics (25°C)



● 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.