

NSFQ500J06 115V500Ah

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).



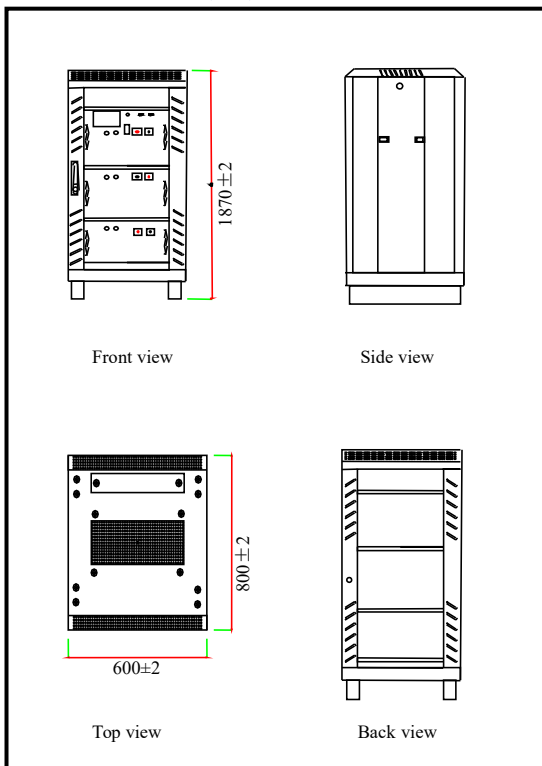
Specifications

| | | |
|------------------|--------------|--------------------------|
| Nominal voltage | | 115V |
| Nominal capacity | | 500Ah |
| Dimensions | Length | 600±2mm (23.62inch) |
| | Width | 800±2mm (31.49inch) |
| | Height | 1800±2mm (70.87inch) |
| | Total height | 1870±2mm (73.62inch) |
| Approx. weight | | 630.0kg (1388.9lbs)±20kg |

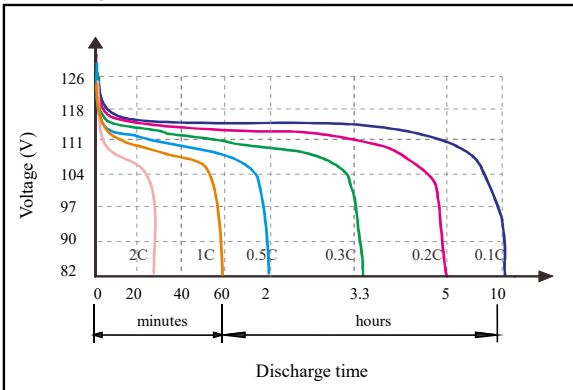
Characteristics

| | | |
|---|----------------------------------|---|
| Electrical Parameters (25°C) | Rated Voltage | 115V |
| | Rated Capacity (C ₅) | 500Ah@25°C |
| | Energy | 57500Wh |
| | Months Self Discharge | <3% |
| | Charge Efficiency | 99.5%@ 0.2C |
| | Discharge Efficiency | 96-99%@ 1C |
| Terminal Diameter | | M8 |
| Internal resistance (Fully charged, 25°C) | | ≤250mΩ |
| 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 | | 131V |
| Standard Charge Mode (25°C±2°C, <75%RH) | | 0.2CA Constant Current to 131V, then Constant Voltage 131V until the current drops to 0.02CA, before use, rest 30 minutes |
| Charge Current | | 100A |
| Maximum Charge Current | | 200A |
| Charge Cut off Voltage | | 131V |
| Continuous Discharge Current | | 200A |
| Maximum Pulse Current | | 400A (<10ms) |
| Discharge Cut Off Voltage | | 99V (min 180V) |
| Communicate Protocol (optional) | | RS485/RS232 |
| SOC (optional) | | LED/PC Software/Screen |
| Application connection | | 1 string 1 parallel |
| Mechanical | Cells | 36 Strings LiFePO4 |
| | Container | Metal |

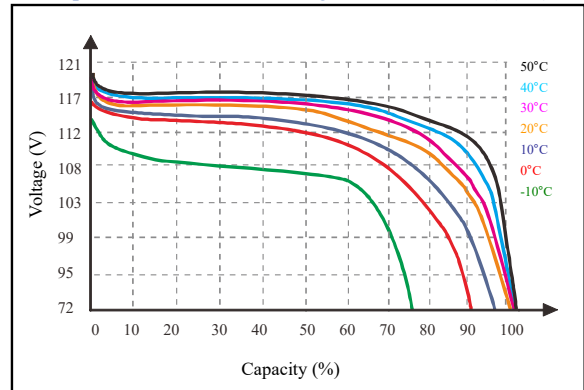
Outer dimensions (mm)



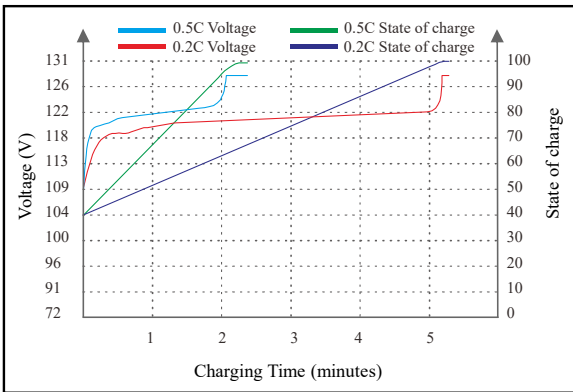
● Discharge characteristics (25°C)



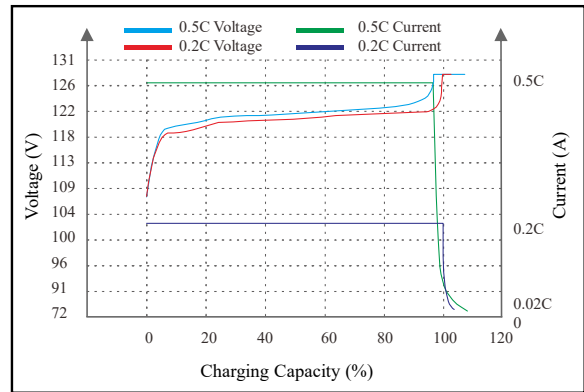
● Temperature affect on discharge characteristics (0.5C)



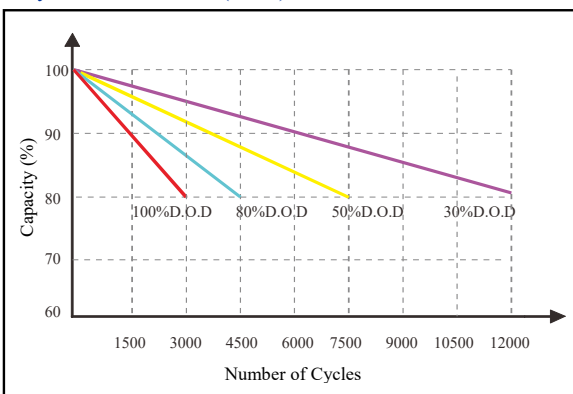
● State of Charge Curve (25°C)



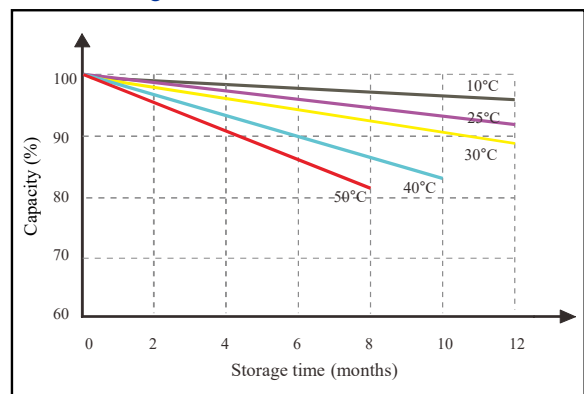
● Charge characteristics (25°C)



● 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.