

## Feature of LiFePO<sub>4</sub> Battery

- **Longer Cycle Life:** Offers up to 10 times longer cycle life and 5 times longer float/calendar life than lead acid battery. Helping to minimize replacement cost and reduce total cost of ownership.
- **Lighter Weight:** About 40% of the weight of a comparable lead acid battery. A "drop in" replacement for lead acid battery.
- **Higher Power:** Delivers twice power of lead acid battery, even high discharge rate, while maintain high energy capacity.
- **Wider Temperature Range:** -20°C~60°C
- **Superior Safety:** Lithium iron phosphate chemistry eliminates the risk of explosion or combustion due to high impact, over charging or short circuit situation.
- **No Memory Effect:** Support unstable partial state of charge (UPSOC) (charge/discharge) utilization.

## Product Photo



• NE-48D100-WP

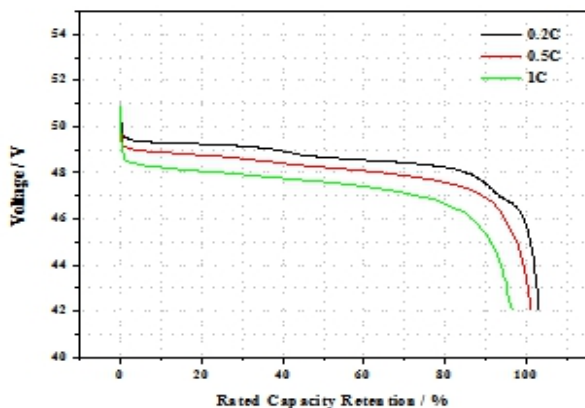
The picture is for reference only, and the final object shall prevail

## Functions of BMS

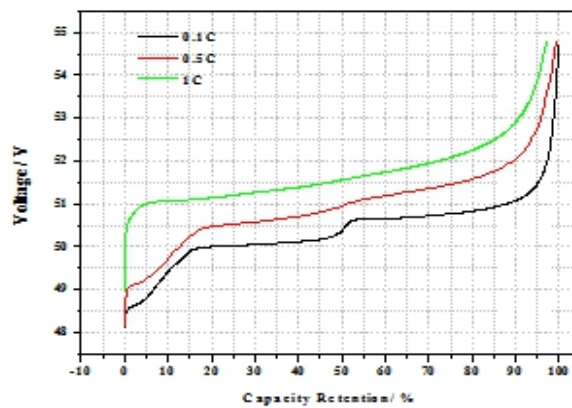
- Over charge detection function
- Over discharge detection function
- Over current detection function
- Temperature protection function
- Short circuit detection function
- Balance function

## Application

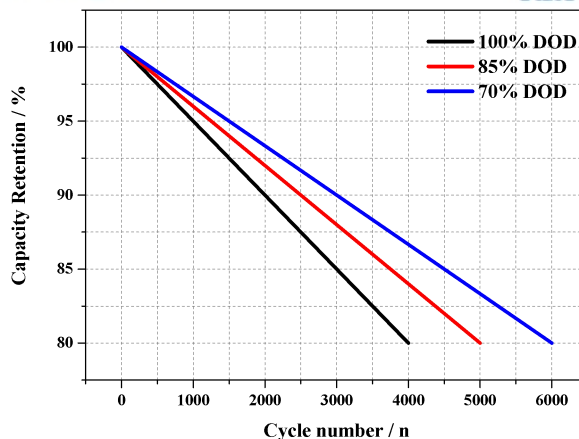
- Home energy storage
- Solar/wind energy storage system
- UPS, backup power
- Telecommunication
- Medical equipment
- Lighting...



Discharge at different C-rate @ 25°C



State of Charge @ 25°C



Cycle Life at Different DOD @ 25°C

## Specification

Model		NE-48D100-NP
Electrical Characteristics	Nominal Voltage	48V
	Nominal Capacity	100Ah
	Energy	4800Wh
	Internal Resistance	≤100mΩ (without BMS)
	Cycle Life	≥5000 cycles (25°C 80%DOD SOH 80%)
	Design Life	≥10 years @25°C
	Self-Discharge (90 days)	≤5%, @25°C
	Efficiency of Charge	≥98%
	Efficiency of Discharge	≥100% @ 0.2C ≥96% @ 0.5C
Charge	Charge Voltage	54.0V±0.5V
	Charge Mode	0.2C to 54.0V, then 54.0V charge current to 0.02C (CC/CV)
	Max. Charge Current	100A
Discharge	Max. Continuous Discharge Current	100A
	Discharge Cut-off Voltage	42.5V±0.5V
Environmental	Charge Temperature Range	0°C~60°C
	Discharge Temperature Range	-20°C~60°C
	Optimum Operation Temperature	10°C~35°C
	Storage Temperature	-20°C~55°C
	Water Dust Resistance	≤85% Relative Humidity IP20
Mechanical	Case	Iron (Insulation painting)
	Dimensions (excluding hanger and handle bar)	442*450*156mm
	Max. Weight	45kg
	Min. Gravimetric Specific energy	107Wh/kg
Other	Protocol	RS485 (3 Nos) / RS232/CAN
	SOC Light	4 * LED
	LCD Screen	Optional, default is no
	Parallel in maximum	15pcs