

Feature of LiFePO₄ 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-NP

Certifications:

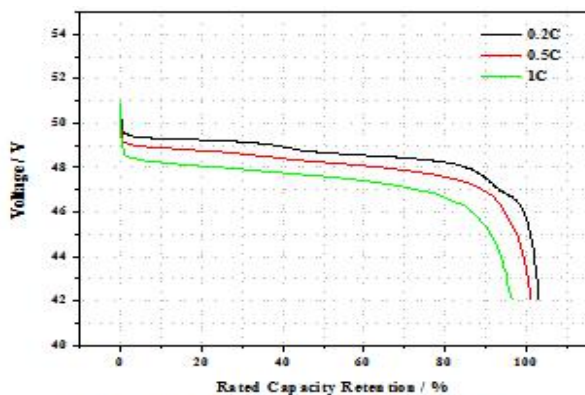
ISO9001, ISO14001, GB/T28001, CE, ROHS, TUV, UL.

Functions of BMS

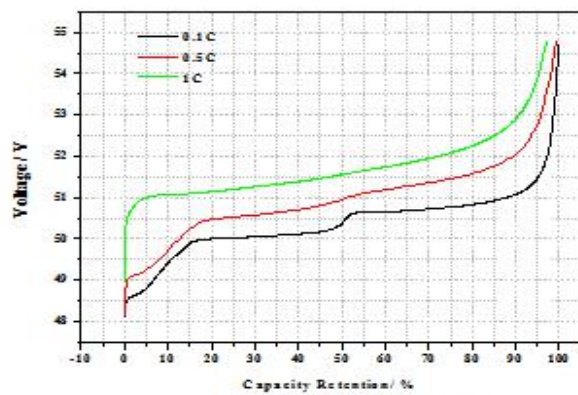
- Over charge detection function
- Over discharge detection function
- Over current detection function
- Temperature protection function
- Short circuit detection function
- Balance function

Application

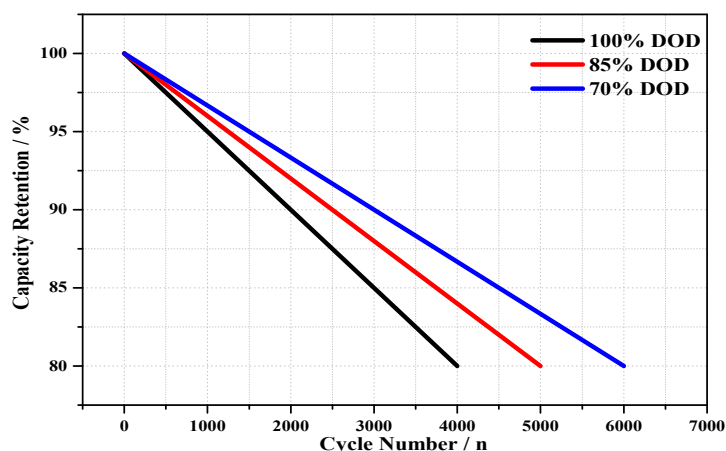
- Electrical vehicles
- Solar/wind energy storage system
- UPS, backup power
- Telecommunication
- Medical equipment
- Lighting...



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 @80% DOD, 25℃
	Design Life	≥20 years @25℃
	Self-Discharge (90 days)	≤5%, @25℃
	Efficiency of Charge	≥98%
	Efficiency of Discharge	≥100% @ 0.2C ≥96% @ 0.5C
Charge	Charge Voltage	54.0V±0.1V
	Charge Mode	0.2C to 54.0V, then 54.0V charge current to 0.02C (CC/CV)
	Max. Charge Current	100A
	Charge Cut-off Voltage	56.25V±0.2V
Discharge	Max. Continuous Discharge Current	100A
	Discharge Cut-off Voltage	42V±0.2V
Environmental	Charge Temperature Range	0℃~60℃
	Discharge Temperature Range	-20℃~60℃
	Optimum Operation Temperature	5℃~45℃
	Storage Temperature	-20℃~55℃ ≤85% relative Humidity
	Water Dust Resistance	IP20
Mechanical	Case	Iron (Insulation painting)
	Dimensions (including the handles)	442*410*178mm
	Weight	~50kg
	Gravimetric Specific energy	~95Wh/kg
Others	Method	15S Cylindrical cells
	Protocol	RS485 (2 Nos) / RS232
	SOC Light	4 * LED
	LCD Screen	Optional