12.8V300AH Battery Specification

1. Overview

Model: NM12.8-300L

Category: Lithium ion phosphate Battery

Application: Residential Energy Storage System, Telecom Base Backup, Motive.

2. Features

This battery consists of LiFePO4 cells, BMS, wire and plastic container.

- High performance LFP cell, long life, safety and wide temperature range.
- High energy density, small size, light weight, no pollution.
- Packing with single cell container, fire retardant wire and copper connecting bar, stable and safe.
- Smart BMS protect battery from abnormal temperature, voltage, current, SOC, SOH.
- Use Lead Acid Battery case, simple installation and expand capacity by parallel or series connect.
- Flexible customization of dimensions, capacity, voltage.
- 15 years design life, Stable performance, maintenance free.

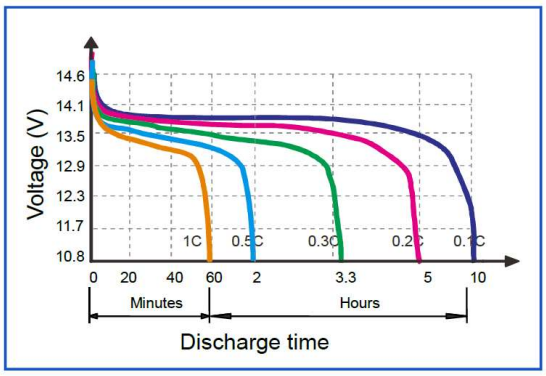
3. Picture

4. Specification

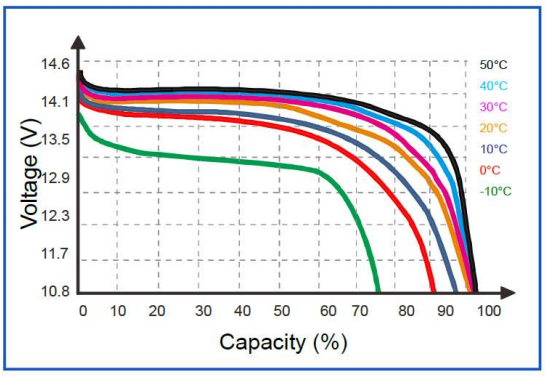
SPECIFICATION	BASIC PARAMETERS	NM12.8-300L
Nominal	Rated Voltage (V)	12.8
	Rated Capacity (Ah)	300
	Rated Energy (Wh)	3840
	Cell Type	LiFePO4 Cell
Physical	Dimension (mm)	502(L)*186(W)*243(H)
	Weight (kg)	≈29
Electrical	Charge Instruction	CC/CV
	Charge Voltage (Vdc)	14.4
	Over Discharge Final Voltage (Vdc)	10.8
	Max. Charge current	300A
	Max. Discharge Current	300A
	Recommended Charge current	100A
	Internal Resistance	≤6mΩ
Others	Series Connect Quantity (pcs)	Max to 4
	Parallel Connect Quantity (pcs)	Max to 4
	Working Temperature (℃)	0 to 45 charge
		-20 to 60 discharge
	Shelf Temperature (℃)	-20 to 45
	Altitude (m)	＜2000
	IP Rating	IP65
	Humidity (RH)	5%～95% RH
	Design Life	15 years
	Cycle Life	80%DOD>6000 cycles，@0.5C (25℃)
	Bluetooth (App)	Optional
	Heating Function	Optional
	Case and Cover	ABS Plastic

5. Curves

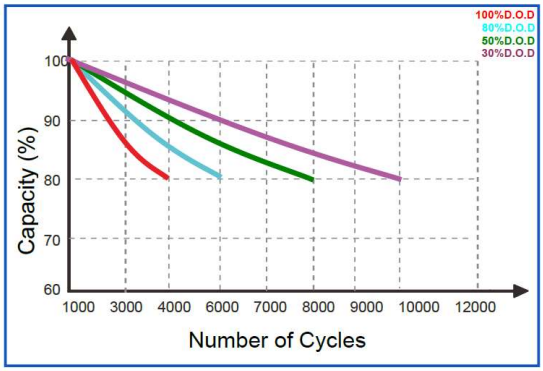
Discharge characteristics (25℃)



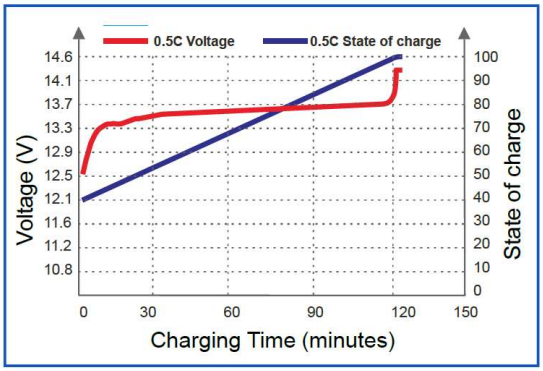
Different Temperature Discharge Curve (0.5C)



Different DOD Discharge cycle life Curve 0.2C 25℃



State of Charge Curve (0.5C, 25℃)



6. Caution

1. Keep it away from Children.

2. Don’t short-circuit battery.

3. Don’t disassemble or modify the battery.

4. Don’t use or leave battery nearby fire, stove or heated place.

5. Don’t immerse battery in water, or make it wet.

6. Don’t drive a nail into battery, strike it by hammer or tread it.

7. Please strictly use the battery according to above charge and discharge conditions.

8. Do not rap or throws, steps on the battery.

9. When battery is long-term storage, suggest to take one time charge and discharge and recharge it to half-charge state every 3 months.