

## NV-LFP-12100E (12.8V100Ah)

NavaSolar NV-LFP series use quality trustable LiFePO<sub>4</sub> cells, with build-in BMS system. IP65 protection, support series and parallel use, is an ideal choice for outdoor, small energy storage, marine and other fields.



### Features

- . Safest lithium battery technology
- . Lithium iron Phosphate Battery(LiFePO<sub>4</sub>)
- . Eco-friendly
- . Special protection plate, supporting parallel
- . Multiple safety protection
- . Intelligent balancing function
- . 20 Years Designed service life

### Mechanical Specifications

Case Material	ABS
Cell Type -Chemistry	Prismatic LiFePO <sub>4</sub>
Terminal Type	M8
IP Grade	IP65

### BMS Characteristics

Recommended Charge Current	50A
Maximum Charge Current	100A
Maximum Continuous Discharge Current	100A
Recommended Charge Voltage	13.6~13.8V
Max Charge Voltage	14.4V
Overcharge Protection Voltage	14.8~15.0V
Charge Mode	CC/CV
Discharge Cut-off Voltage (BMS)	8.8V

### Basic Performance

Nominal Voltage	12.8V
Nominal Capacity	100Ah
Standard Discharge Time	100A @60min
Energy	1.28K Wh
IR	<= 15mQ
Self Discharge	<=2%/Month
Cells	Square 100Ah
Cycle Life	2500 times
Size	306*169*215
Weight	10.1

### Compliance

Certifications	CE/UN38.3/UL1642/IEC62133
Transport Appraisal	UN3480,CLASS 9

### Charge Performance

Rated Charge Current	50A
Maximum Charge Current	100A
Rated Charge Voltage	13.6~13.8V
Charge Cut-off Voltage	> 14.8V(0.5~1.5S)
Reconnect Voltage	<14.4 V
Balancing Voltage	< 14V
System Series	<=4

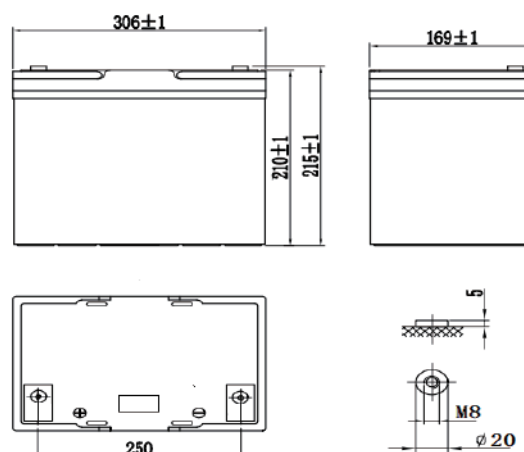
### Discharge Performance

Rated Discharge Current	100A
Pulse Current(<=5S)	600A
Rated Discharge Cut-off Voltage	11.2V
Minimum Discharge Cut-off Voltage	>10V
Reconnect Voltage	>10.4V
Short Circuit Protection	200~800 μs
Short Circuit Current	Approx. 1200A

### Temperature Performance

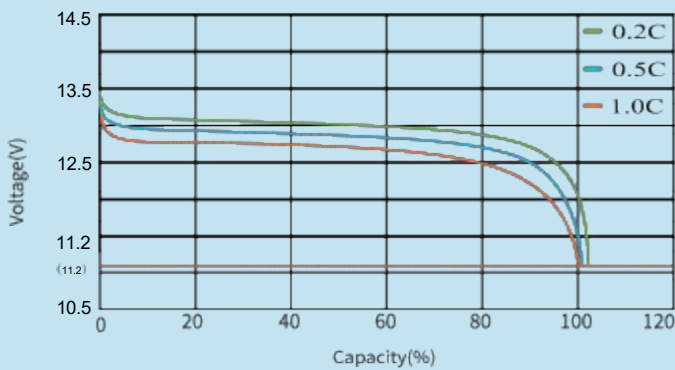
Discharge Temperature	-20~60°C
Charge Temperature	0~45°C
Storage Temperature	-5~35°C
High Temperature Cut-off	70°C
Reconnect Temperature	50°C

### Size

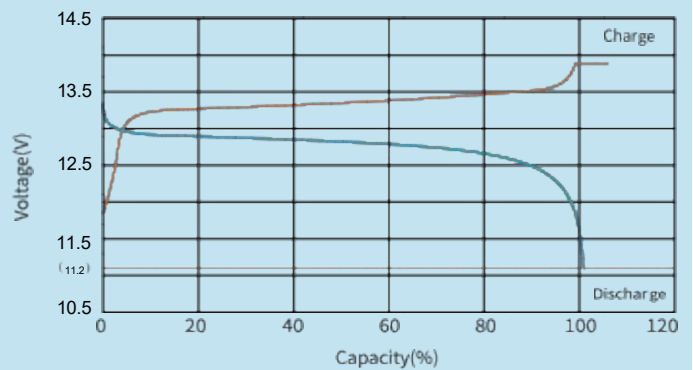


## Characteristics Curve

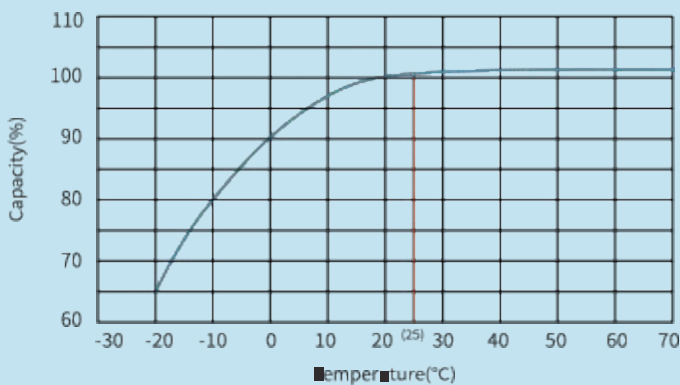
Discharge Performance at 25 °C



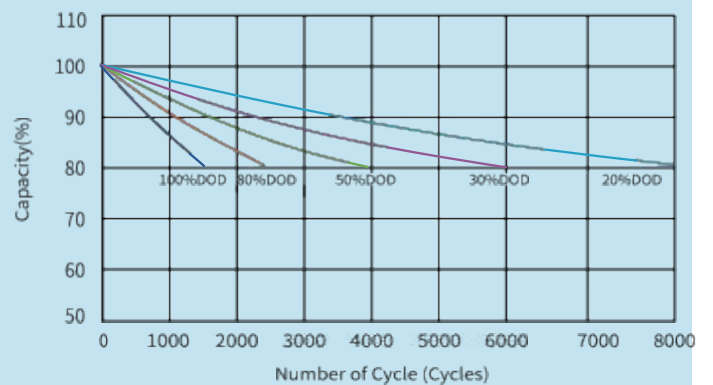
Charge and Discharge at 25°C, 0.5C



Temperature Effects on Capacity at 0.5C



Cycle Life with DOD @ 0.5°C, 25°C



## Cautions

1. Do NOT short circuit, crush or disassemble.
2. Do NOT heat or incinerate.
3. Do NOT immerse in any liquid.
4. Store at 50% capacity. Recharge every 3 months. The storage area should be clean, cool, dry and ventilated.
5. Disconnect charging source prior to connecting or disconnecting battery terminals.
6. Do not dispose of batteries in a fire as they can explode.
7. Do not open, alter, or mutilate batteries. Released electrolyte is harmful to skin and eyes. It may be toxic.
8. Do not mix different types and brands of lithium-ion batteries.
9. Do not dispose in trash, follow local regulations and manufacturer's instruction.
10. See installation instructions before connecting to the supply.
11. The battery cabinet receives power from more than one source. Disconnection of all DC sources is required to De-energize this unit before installing or servicing.  
Wait 5 minutes before opening the unit.
12. Do not install on or over combustible surfaces.
13. Refer to manual before servicing.
14. Do not touch bare terminals.