

LEXRON[®] 51.2V 100Ah LiFePO4 Batteries

LEXRON Provides Safe and Efficient LFP Battery Solutions.

LXR series adopt best value LiFePO4 cells, with the BMS system independently designed by LEXRON. series and parallel use, is energy storage, marine and other fields. IP65 protection, support an ideal choice for outdoor, small

Features

- Safest lithium battery technology
- Lithium iron Phosphate Battery(LiFePO4)
- Eco-friendly
- Special protection plate
- Multiple safety protection
- Intelligent balancing function
- 20 Years Designed service life

Mechanical Specifications

Case Material	ABS
Cell Type-Chemistry	Prismatic LiFePO4
Terminal Type	M8
IP Grade	IP65

BMS Characteristics

Recommended Charge Current	50A
Maximum Charge Current	50A
Maximum Continuous Discharge Current	50A
Recommended Charge Voltage	51~51.75V
Max Charge Voltage	54.75V
Overcharge Protection Voltage	59.2~60.8V
Charge Mode	CC/CV
Discharge Cut-off Voltage	44.8V

Basic Performance

Nominal Voltage	48V
Nominal Capacity	100Ah
Standard Discharge Time	100A@60min
Capacity	4.8KWh
IR	$\leq 10\text{m}\Omega$
Self Discharge	$\leq 2\%/ \text{Month}$
Cells	Square 100Ah
Cycle Life	3500 times(1C/1C)
Size (mm)	522*238*223
Weight (kg)	36.0



Charge Performance

Rated Charge Current	50A
Maximum Charge Current	100A
Rated Charge Voltage	51~51.75V
Charge Cut-off Voltage	$> 54.75\text{V}(0.5\sim 1.5\text{S})$
Reconnect Voltage	$< 57.6\text{V}$
Balancing Voltage	$> 51\text{V}$
System Series	NO

Discharge Performance

Rated Discharge Current	50A
Pulse Current($\leq 5\text{S}$)	600A
Rated Discharge Cut-off Voltage	42V
Minimum Discharge Cut-off Voltage	$> 40\text{V}$
Reconnect Voltage	$> 37.5\text{V}$
Short Circuit Protection	200~600 μs
Short Circuit Current	Approx. 2000A

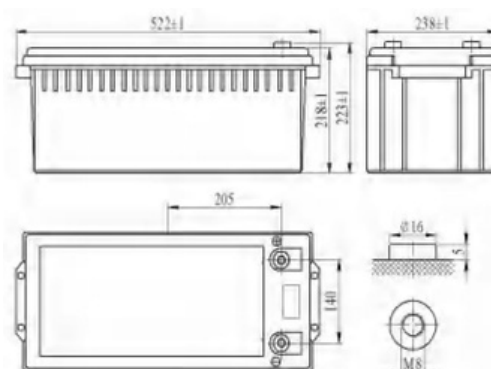
Temperature Performance

Discharge Temperature	$-20\sim 60^{\circ}\text{C}$
Charge Temperature	$-20\sim 60^{\circ}\text{C}$
Storage Temperature	$-30\sim 60^{\circ}\text{C}$
High Temperature Cut-off	65°C
Reconnect Temperature	48°C

Compliance

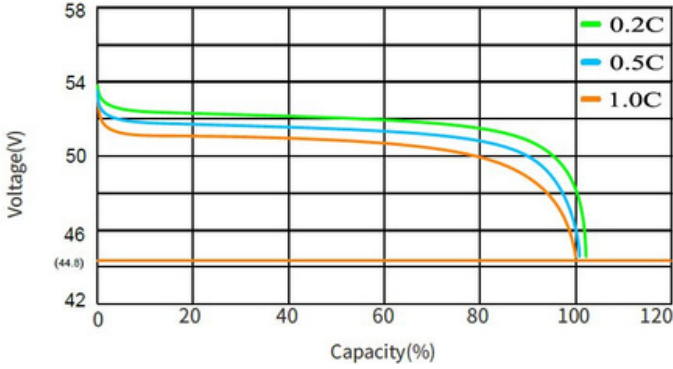
Certifications	CE/UN38.3/UL1642/IEC62133
Transport Appraisal	UN3480,CLASS 9

Size

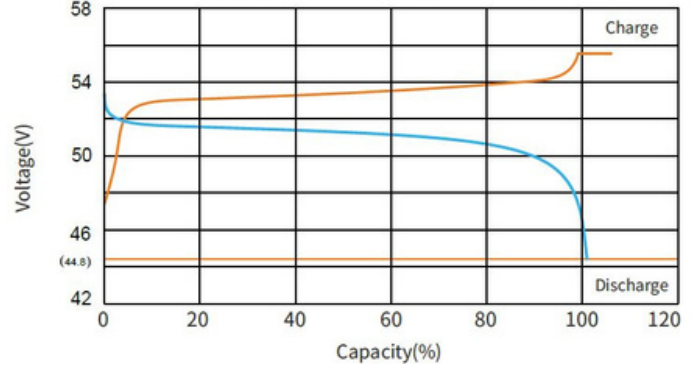


Characteristics Curve

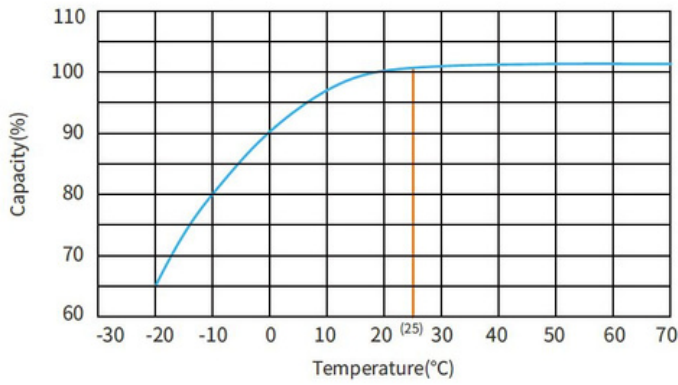
Discharge Performance at 25°C



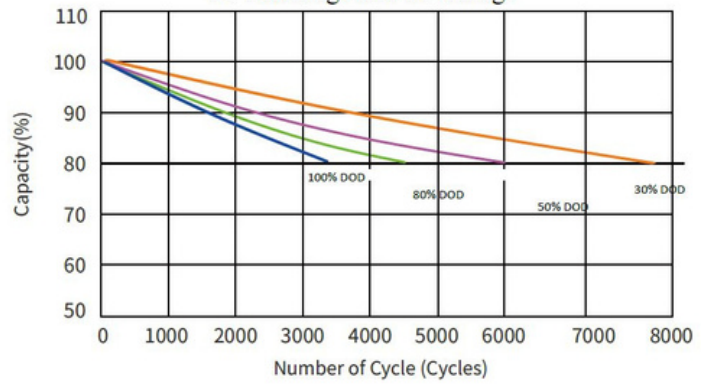
Charge and Discharge at 25°C, 0.5C



Temperature Effects on Capacity at 0.5C



Cycle Life with DOD at 25°C
1C Discharge and 1C Charge



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.
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.