

Enjoybot Deep Cycle LiFePO4 Lithium Battery 12V 100Ah Group 31 Low-Temp Protection



DIMENSIONAL SPECIFICATIONS



ELECTRICAL SPECIFICATIONS

Nominal Voltage	12.8V
Nominal Capacity	100Ah, 1280Wh
Cell Type - Chemistry	LiFePO4
Cycle Life	4000+ cycles at 100% DOD, 6000 cycles at 80% DOD
BMS Rating	100A

MECHANICAL SPECIFICATIONS

Dimensions(L xW x H)	12.95 x 6.77 x 8.42 inch 329 x 172 x 214 mm
Weight	23 lbs (10.5kg)
Terminal	M8*16mm (L)
Case Material	ABS Plastic
Waterproof Rating	IP67

HIGH QUALITY LITHIUM BATTERY

- High energy density: Provides long runtimes and has a large storage capacity.
- Longer lifespan: Can undergo more charge and discharge cycles, resulting in longer service life.
- Enhanced stability and safety: Less susceptible to safety issues like overheating and fire.
- Environmentally friendly: No liquid, non-toxic, and causes less pollution to the environment.
- Fast charging: Reduces users' charging time.

CHARGE SPECIFICATIONS

Recommended Charge Current	20A
Max. Continuous Charging Current	50A
Recommended Charge Voltage	14.2 V – 14.6V
Max. Batteries in Series	6
Max. Batteries in Parallel	4
Max. Configuration	6S4P

TEMPERATURE SPECIFICATIONS

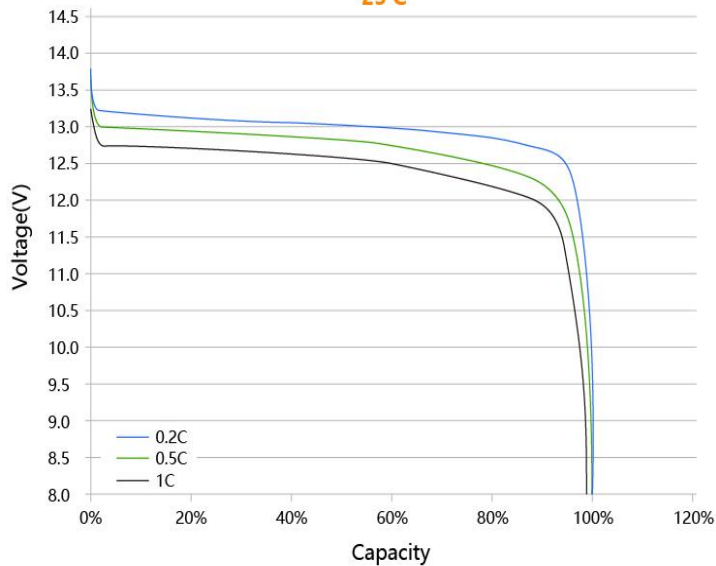
Charge Temperature	32 ~ 122 °F (0 ~ 50 °C)
Discharge Temperature	-4 ~ 140 °F (-20 ~ 60 °C)
Storage Temperature	14 ~ 122 °F (-10 ~ 50°C)
High Temp Cut-Off / Recovery	167 °F (75 °C) / 122°F (50 °C)
Low Temp Cut-Off / Recovery	32 °F (0 °C) / 41°F (5 °C)

DISCHARGE SPECIFICATIONS

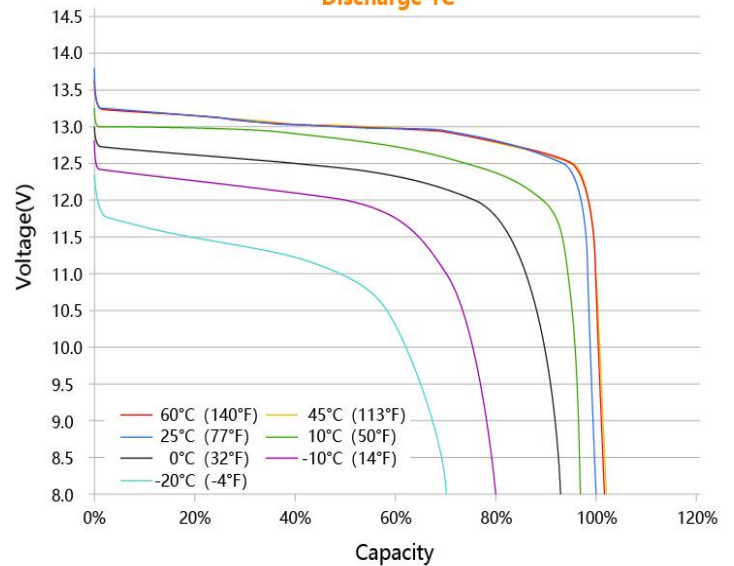
Max. Continuous Discharge Current	100A
Peak Discharge Current	350A (3-5s)
Max Depth of Discharge (DOD)	100%
Max. Load /Inverter Power	1280W

PERFORMANCE CHARACTERISTICS

Discharge Voltage Characteristics at Various Rates
25°C



Discharge Voltage Characteristics at Various Temperatures
Discharge 1C



STATE OF CHARGE (SOC)

Charge

Discharge

Voltage(V)	Electricity	Voltage(V)	Electricity
11.68	0%	13.4	100%
12.88	10%	13.32	90%
13.09	20%	13.32	80%
13.21	30%	13.31	70%
13.22	40%	13.18	60%
13.23	50%	13.16	50%
13.25	60%	13.15	40%
13.36	70%	13.08	30%
13.37	80%	12.96	20%
13.37	90%	12.81	10%
13.38	100%	11.17	0%

*12.8V LiFePO4 battery laboratory test data (for reference only)

MPPT PARAMETER SETTINGS

Charging:

Charging Limit Voltage: 14.2V

Over Voltage Disconnect Voltage: 14.6V

Over Voltage Reconnect Voltage: 13.8V

Float Charging Voltage: 13.8V

Discharging:

Low Voltage Disconnect Voltage: 11.6V

Low Voltage Reconnect Voltage: 12.4V

Under Voltage Warning Voltage: 12.8V

APPLICATIONS



Golf Cart



RV, Camper



Solar



Trolling Motor

ALL-ROUND PROTECTION WITH BMS



Overcharge
Protection



High/Low
Temperature
Protection



Short-circuit
Protection



Over-discharge
Protection



Overload
Protection



Battery Cell
Balancing