

Enjoybot Lithium Iron Phosphate LiFePO4 Deep Cycle Battery 12V 280Ah



MSDS



DIMENSIONAL SPECIFICATIONS



ELECTRICAL SPECIFICATIONS

Nominal Voltage	12.8V
Nominal Capacity	280Ah, 3584Wh
Cell Type - Chemistry	LiFePO4
Cycle Life	5000 times @80% DOD
BMS Rating	200A

MECHANICAL SPECIFICATIONS

Dimensions(L xW x H)	520 x 269 x 220 inch 522 x 240 x 218 mm
Weight	58.42 lbs (26.5kg)
Terminal	M8*16mm (L)
Case Material	ABS Plastic
Waterproof Rating	IP65

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	40 A
Max. Continuous Charging Current	100A
Recommended Charge Voltage	14.2 V – 14.6V
Max. Batteries in Series	4
Max. Batteries in Parallel	10
Max. Configuration	4S4P

TEMPERATURE SPECIFICATIONS

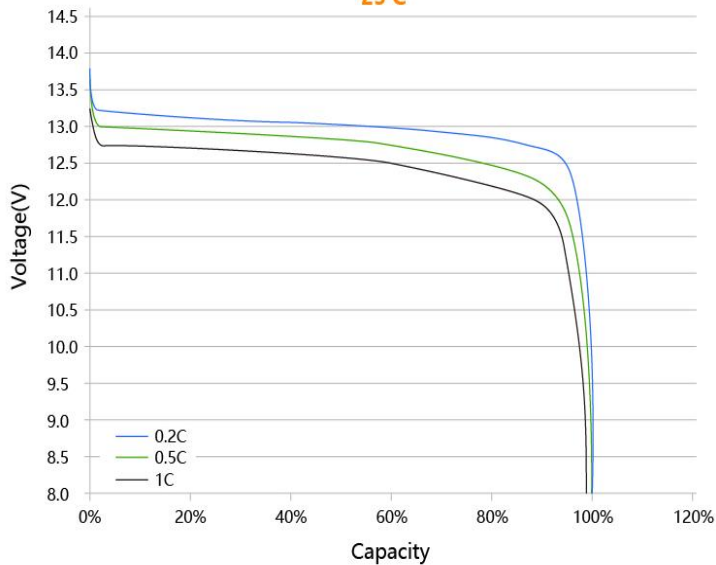
Charge Temperature	32 ~ 122 °F (0 ~ 50 °C)
Discharge Temperature	-4 ~ 140 °F (-20 ~ 60 °C)
Storage Temperature	14 ~ 122 °F (-10 ~ 50°C)
High Temp Cut-Off / Recovery	167 °F (75 °C) / 122°F (50 °C)
Low Temp Cut-Off / Recovery	32 °F (0 °C) / 41°F (5 °C)

DISCHARGE SPECIFICATIONS

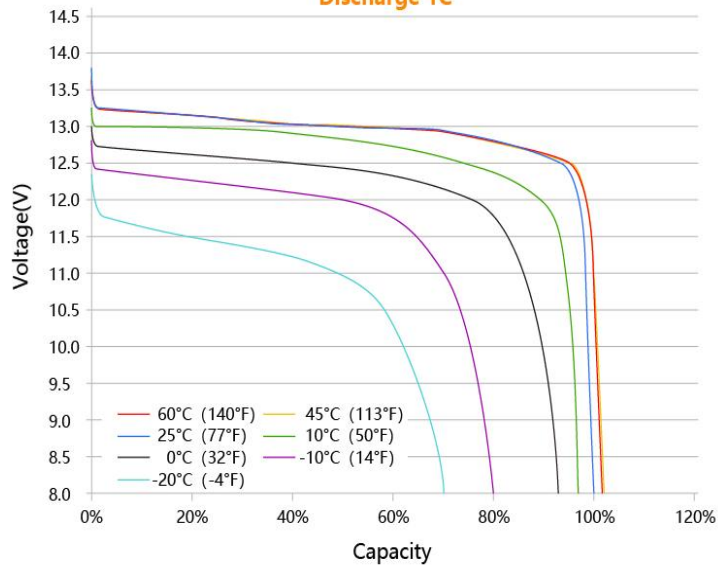
Max. Continuous Discharge Current	200A
Peak Discharge Current	700A (3-5s)
Max Depth of Discharge (DOD)	100%
Max. Load /Inverter Power	2560W

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
11.85	0%	13.4~13.8	100%
13.01	10%	13.38	90%
13.21	20%	13.37	80%
13.33	30%	13.37	70%
13.33	40%	13.26	60%
13.33	50%	13.23	50%
13.35	60%	13.21	40%
13.45	70%	13.15	30%
13.45	80%	13.04	20%
13.45	90%	12.91	10%
13.6	100%	11.85	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