

# Enjoybot Lithium Iron Phosphate LiFePO4 Deep Cycle Battery 24V 100Ah



**MSDS**



## DIMENSIONAL SPECIFICATIONS



## ELECTRICAL SPECIFICATIONS

Nominal Voltage	25.6V
Nominal Capacity	100Ah, 2560Wh
Cell Type - Chemistry	LiFePO4
Cycle Life	5000 times @80% DOD
BMS Rating	100A

## MECHANICAL SPECIFICATIONS

Dimensions(L xW x H)	20.55 x 9.45 x 8.58 inch 522 x 240 x 218 mm
Weight	42.55 lbs (19.3kg)
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	20 A
Max. Continuous Charging Current	50A
Recommended Charge Voltage	28.8V - 29.2V
Max. Batteries in Series	2
Max. Batteries in Parallel	10
Max. Configuration	2S4P

## TEMPERATURE SPECIFICATIONS

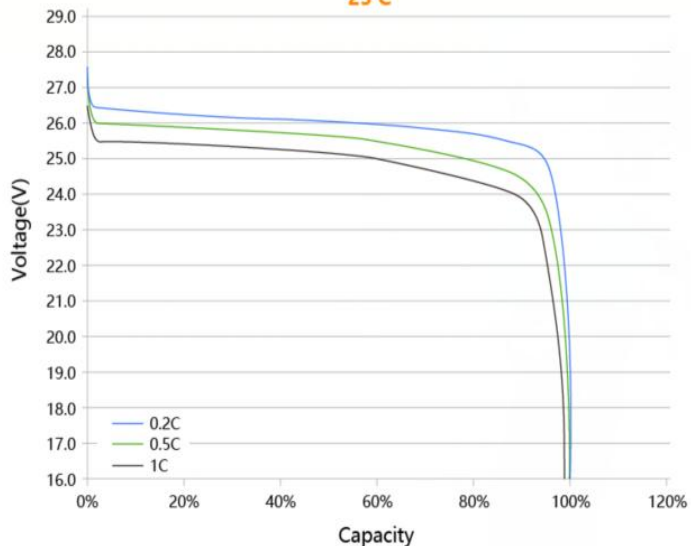
Charge Temperature	32 ~ 122 °F (0 ~ 50 °C)
Discharge Temperature	-4 ~ 140 °F (-20 ~ 60 °C)
Storage Temperature	14 ~ 122 °F (-10 ~ 50°C)
High Temp Cut-Off / Recovery	167 °F (75 °C) / 122°F (50 °C)
Low Temp Cut-Off / Recovery	32 °F (0 °C) / 41°F (5 °C)

## DISCHARGE SPECIFICATIONS

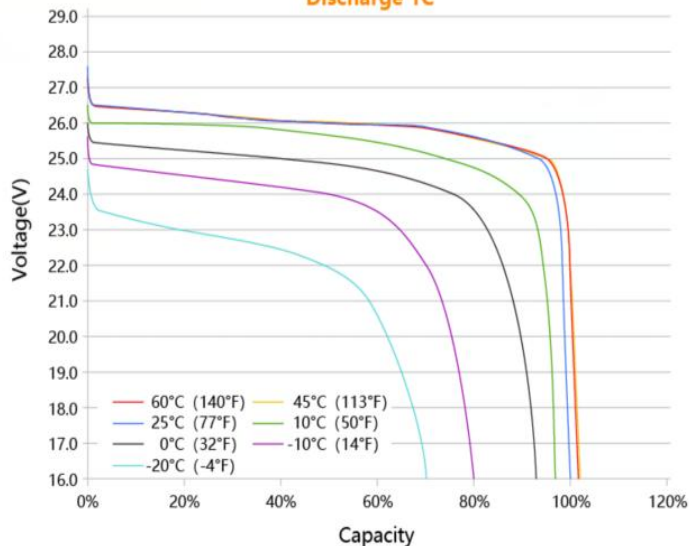
Max. Continuous Discharge Current	100A
Peak Discharge Current	350A (3-5s)
Max Depth of Discharge (DOD)	100%
Max. Load /Inverter Power	2560W

# 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
23.7	0%	26.8~27.6	100%
26.02	10%	26.76	90%
26.42	20%	26.74	80%
26.66	30%	26.74	70%
26.66	40%	26.52	60%
26.66	50%	26.46	50%
26.7	60%	26.42	40%
26.9	70%	26.3	30%
26.9	80%	26.08	20%
26.9	90%	25.82	10%
27.2	100%	23.7	0%

\*25.6V LiFePO4 battery laboratory test data (for reference only)

## MPPT PARAMETER SETTINGS

### Charging:

Charging Limit Voltage: 28.4V

Over Voltage Disconnect Voltage: 29.2V

Over Voltage Reconnect Voltage: 27.6V

Float Charging Voltage: 27.6V

### Discharging:

Low Voltage Disconnect Voltage: 23.2V

Low Voltage Reconnect Voltage: 24.8V

Under Voltage Warning Voltage: 25.6V

## 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