

Enjoybot Lithium Iron Phosphate LiFePO4 Deep Cycle Battery 48V 100Ah



MSDS



DIMENSIONAL SPECIFICATIONS



ELECTRICAL SPECIFICATIONS

Nominal Voltage	51.2V
Nominal Capacity	100Ah, 5120Wh
Cell Type - Chemistry	LiFePO4
Cycle Life	5000 times @80% DOD
BMS Rating	100A

MECHANICAL SPECIFICATIONS

Dimensions(L xW x H)	20.47 x 10.59 x 8.66 inch 520 x 269 x 220 mm
Weight	81.57 lbs (37kg)
Terminal	M8*16mm (L)
Case Material	ABS Plastic
Waterproof Rating	IP65

BLUETOOTH APP DOWNLOAD



CHARGE SPECIFICATIONS

Recommended Charge Current	20 A
Max. Continuous Charging Current	50A
Recommended Charge Voltage	56.8 V – 58.4V
Max. Batteries in Series	1
Max. Batteries in Parallel	10
Max. Configuration	1S4P

TEMPERATURE SPECIFICATIONS

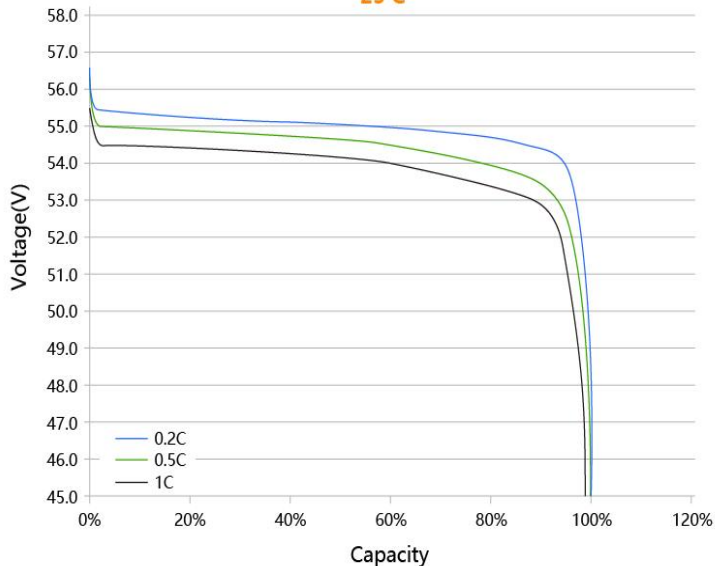
Charge Temperature	32 ~ 122 °F (0 ~ 50 °C)
Discharge Temperature	-4 ~ 140 °F (-20 ~ 60 °C)
Storage Temperature	14 ~ 122 °F (-10 ~ 50°C)
High Temp Cut-Off / Recovery	167 °F (75 °C) / 122°F (50 °C)
Low Temp Cut-Off / Recovery	32 °F (0 °C) / 41°F (5 °C)

DISCHARGE SPECIFICATIONS

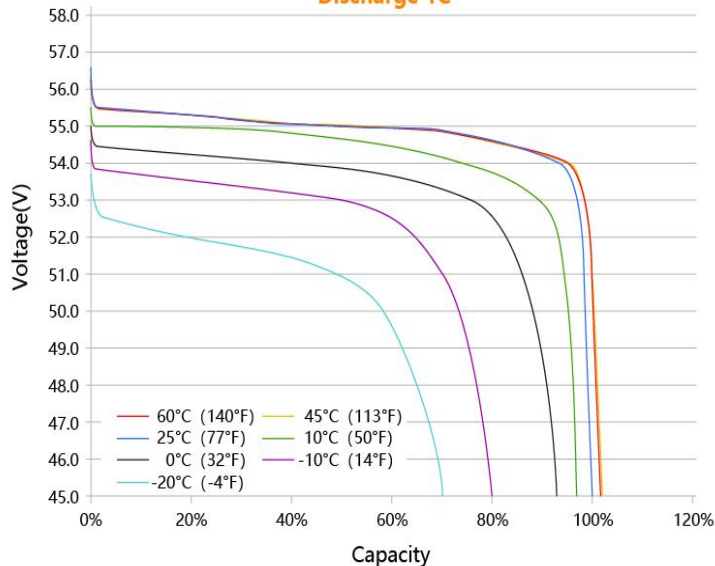
Max. Continuous Discharge Current	100A
Peak Discharge Current	500A (3-5s)
Max Depth of Discharge (DOD)	100%
Max. Load /Inverter Power	5120W

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
47.4	0%	53.6~55.5	100%
52.04	10%	53.52	90%
52.84	20%	53.48	80%
53.32	30%	53.48	70%
53.32	40%	53.04	60%
53.32	50%	52.92	50%
53.4	60%	52.84	40%
53.8	70%	52.6	30%
53.8	80%	52.16	20%
53.8	90%	51.64	10%
54.4	100%	47.4	0%

*51.2V LiFePO4 battery laboratory test data (for reference only)

MPPT PARAMETER SETTINGS

Charging:

Charging Limit Voltage: 56.8V

Over Voltage Disconnect Voltage: 58.4V

Over Voltage Reconnect Voltage: 55.2V

Float Charging Voltage: 55.2V

Discharging:

Low Voltage Disconnect Voltage: 46.4V

Low Voltage Reconnect Voltage: 49.6V

Under Voltage Warning Voltage: 51.2V

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