



Item	Specification	Description/Remark
Model	AT-LFP-12-100BV01	12V 100Ah / 175A Continuous Discharge Lithium LiFePO4 battery
Chemistry	Lithium Iron Phosphate (LiFePO ₄)	
Dimensions	330 x 173 x 215mm	LxWxH
Weight	13kg	
Warranty	4 year warranty	
IP Rating	IP65	
Standard capacity (0.2C5A)	100Ah / 1280Wh	
Cycle life	2000-3000 @ 100% DoD	Test conditions at 25°C, 1C / 1C charge and discharge rate. Higher cycle life can be achieved at lesser charge and discharge rates.
Rated voltage	12.8V	Voltage per cell: 3.2V
Max charge voltage	14.6V	Max. charge voltage per cell: 3.65V
Cut-off voltage	~10V	Battery cells are disconnected once the lowest cell reaches 2.50V
Depth of Discharge (DoD)	100%	Batteries can be discharged to 100% of the rated capacity
Standard charge current	20A	0.2C5A
Max continuous discharge current	175A	1.75C
Peak discharge current	320A	3.2C (3 seconds)
Discharge performance in normal temperature	10A (0.2C ₃ A) ≥ 100 % 50A (1C ₃ A) ≥90 %	
Operating temperatures	Standard $0^{\circ}\text{C}{\sim}45^{\circ}\text{C}$ Discharge $-20^{\circ}\text{C}{\sim}65^{\circ}\text{C}$ Storage $-20^{\circ}\text{C}{\sim}45^{\circ}\text{C}$	
Impedance (Max, at 1000Hz.)	≤ 20mΩ	
Storage performance	Capacity can be kept ≥ 80% in storage for 12months	Battery should be kept at -20°C \sim 65°C in a dry, clean and well-ventilated location

Heavy Duty - Built in Battery Protection System

AMPTRON® lithium batteries have a built-in Battery Protection System (BPS) designed to prevent damage to the cells from most external accidental occurrence that would normally cause damage. The internal BPS will automatically disconnect to prevent damage to the cells, and will automatically reconnect when the conditions return to normal range. This technology also performs internal cell balancing to pre-vent any cells developing potentially damaging imbalances when charging.

Internal Features:

Low Voltage Protection Switch - Automatically disconnects at 10V

Over Voltage Protection Switch - Automatically disconnects at 14.6 V

Short Circuit Protection Switch - Automatically disconnects;

Internal cell balancing - The BPS balances the cells by sending more current through the length way circuit boards and into cells with a lower voltage. The BPS will also discharge cells that exceed 3.65V during charging.