

Item	Specification	Description/Remark
Model	AT-LFP-12-100FV02	12V 100Ah / 175Amp Lithium LiFePO4 Slimline Battery
Chemistry	Lithium Iron Phosphate (LiFePO <sub>4</sub> )	
Dimensions	395mm x 110mm x 220mm	L x W x H
Weight	11.2kg	
Warranty	4 year warranty	
IP Rating	IP65	ABS Casing
Standard capacity (0.2C5A)	100 Ah / 1280Wh	
Cycle life	> 2000 cycles at 100% Depth of Discharge (DoD) with the battery capacity retention is ≥ 80%	Test conditions at 25C, 1C/1C charge & discharge. Higher cycle life can be achieved at lesser charge & discharge rates
Rated voltage	12.8V	Working voltage per cell: 3.2V
Max charge voltage	14.4—14.6V	Max. charge voltage per cell: 3.65V
Cut-off voltage	11.5 to 10V	Cut-off is triggered when the first cell reaches 2.50V
Depth of Discharge (DoD)	100%	Batteries can be discharged to 100% of the rated capacity
Standard charge current	25A	0.25C
Max continuous discharge current	175A	1.75C, cell min voltage > 2.0V
Peak discharge current	350A	3.5C (5 seconds)
Charge/discharge efficiency	20A (0.2C3A) ≥ 100% 1C3A ≥90%	
Operating temperatures	Charge 0°C~45°C Discharge -20°C~60°C Storage -20°C~45°C	
Impedance (Max, at 1000Hz.)	≤ 10mΩ	
Storage performance	Capacity can be kept ≥ 80% in storage for 12months	Battery should be kept at -20°C~45°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 14.6V

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.