



Item	Specification	Description/Remark
Model	AT-LFP-36-100V02	36V 100Ah / 100A LiFePO₄ battery
Chemistry	Lithium Iron Phosphate (LiFePO <sub>4</sub> )	
Dimensions	520mm x 268mm x 228mm	LxWxH
Weight	~ 33kg	
Warranty	4 year warranty	
IP Rating	IP65	
Standard capacity(0.2C5A)	100Ah / 3840Wh	
Cycle life	> 2000 cycles at 100% Depth of Discharge (DoD) with the battery capacity retention is ≥ 80%	Capacity ≥ Standard capacity x 80%  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	38.4	Voltage per cell: 3.2V
Max charge voltage	43.2V	Max. charge voltage per cell: 3.65V
Cut-off voltage	~ 20V	Battery cells are disconnected once the lowest cell reaches 2.5V
Depth of Discharge (DoD)	100%	Batteries can be discharged to 100% of the rated capacity
Standard charge current	20A	0.2C
Max continuous discharge current	100A	1C
Peak discharge current	200A	2C (5 seconds)
Charge/discharge efficiency	≥96%	
Operating temperatures	Charge $0^{\circ}\text{C}{\sim}45^{\circ}\text{C}$ Discharge $-20^{\circ}\text{C}{\sim}60^{\circ}\text{C}$ Storage $-20^{\circ}\text{C}{\sim}45^{\circ}\text{C}$	
Impedance (Max, at 1000Hz.)	≤ 45mΩ	
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. The BPS will also discharge cells that exceed 3.65V during charging.