

Item	Specification	Description/Remark
Model	AT-LFP-24-50AV01	24V 50Ah / 100A LiFePO ₄ battery
Chemistry	Lithium Iron Phosphate (LiFePO ₄)	
Dimensions	328mm x 171mm x 215mm	L x W x H
Weight	13.5kg	
Warranty	4 year warranty	
IP Rating	IP65	waterproof ABS plastics casing
Standard capacity	50Ah / 2560Wh	
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	25.6V	Voltage per cell: 3.2V
Max charge voltage	29.2V	Max. charge voltage per cell: 3.65V
Cut-off voltage	~ 20V	Cut-off is triggered when the first cell reaches 2.5V
Depth of Discharge (DoD)	100%	Batteries can be discharged to 100% of the rated capacity
Standard charge current	10A	0.2C
Max continuous discharge current	70A	1.4C
Peak discharge current	140A	2.8C (5 seconds)
Charge /discharge efficiency	≥96%	
Operating temperatures	Standard 0°C~45°C Discharge -20°C~60°C Storage -20°C~45°C	
Impedance (Max, at 1000Hz.)	≤ 20mΩ	
Storage performance	Capacity can be kept ≥ 80% in storage for 12months	Battery should be kept at -20°C~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 14.6V
- 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.