

Item	Specification	Description/Remark
Model	AT-LFP-36-150BV01	36V 150Ah Lithium LiFePO4 battery
Chemistry	Lithium Iron Phosphate (LiFePO4)	
Battery dimensions	L-520mm x W-268mm x H-228mm	
Weight	40kg	
Cell type	3.2V 100Ah prismatic cells	
Battery module	12 pcs 3.2V 150Ah cells in series	
Casing material for single cell	Aluminium	
Standard capacity (0.2C5A)	38.4V 150Ah / 5,760Wh	
> 2000 cycles at 100% Depth of Discharge (DoD)	Cycle life	Under normal usage where the DOD is <80%, cycle life is expected to be up to 5000 cycles
Rated voltage	38.4V	Working voltage per cell: 3.2V
Max charge voltage	43.2V	Max. charge voltage per cell: 3.65V
Cut-off voltage	32.0V	Discharge voltage per cell: 2.50V
Depth of discharge (DoD)	100%	Batteries can be discharged to 100% of the rated capacity
Standard charge current	30A	0.3C
Charging time	Approximately 5 hours	When charging from low voltage cut-off point
Optimum charge current range	30A (0.2C)	Cell max voltage < 3.9V
Rapid charging	Max. charge current 175A (1C)	Temperature increase falling within 15°C is normal. Over 15°C will affect the service life of the cells.
Max continuous discharge current	175A	1.75C, cell min voltage > 2.0v
Peak discharge current	300A	3C (10 seconds)
Discharge performance in normal temperature	20A (0.2C) ≥ 100 1C ≥ 90%	
Operating temperatures	Standard 0°C ~ 45°C Discharge -20°C ~ 65°C Storage -20°C ~ 45°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 where it's dry, clean and well-ventilated.
Connecting Terminals Pos (+) & Neg (-)	M8	
IP Rating (Ingress Protection)	IP65	Protected from total dust ingress & protected from low pressure water jets from any direction

#### 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 prevent 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.