

Item	Specification	Description/Remark
Model	AT-LFP-12-22V01	12V 22Ah Lithium LiFePO ₄ battery and battery charger Combo kit
Chemistry	Lithium Iron Phosphate (LiFePO ₄)	
Dimensions	168mm x 128mm x 103mm	L x W x H
Weight	2.9kg	
Warranty	4 year warranty	
IP Rating	IP65	
Standard capacity (0.2C _{5A})	22Ah / 281.6Wh	
Cycle life	> 2000 cycles at 100% Depth of Discharge (DoD)	Under normal usage where the DOD is <80%, cycle life is expected to be up to 5000 cycles
Rated voltage	12.8V	Voltage per cell: 3.2V
Max charge voltage	14.4±0.1V	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	≤ 3A	
Max continuous discharge current	22A	1C, cell min voltage > 2.0v
Peak discharge current	30A	1.36C (5 minutes)
Discharge performance in normal temperature	10A (0.2C _{3A}) ≥ 100% 50A (1C _{3A}) ≥ 90%	
Operating temperatures	Standard 0°C~45°C Discharge -20°C~65°C Storage -20°C~45°C	
Impedance (Max, at 1000Hz.)	≤ 40mΩ	
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.