Item	Specification	Description/Remark
Model	AT-LFP-12-150-BT-BV03	12V 200Ah / 200A Continuous Discharge Lithium LiFePO4 battery with Bluetooth Connectivity
Chemistry	Lithium Iron Phosphate (LiFePO4)	
Battery dimensions	L-330mm x W-172mm x H-216mm	
Weight	16kg	
Cell type	Prismatic cells	
Battery module	8 pcs 3.2V 100Ah cells, 2 parallel strings of 4 cells in series	
Casing material for single cell	Aluminium	
Standard capacity (0.2C5A)	150Ah / 1920Wh	
Battery packs in series	Supported (4)	
Battery packs in parallel	Supported	
Cycle life	>3000 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	Working voltage per cell: 3.2V
Charge voltage	10.4 – 14.6V	Max. charge voltage per cell: 3.65V
Cut-off voltage	10V for lowest cell, nominal 10V	Cut-off is triggered when the first cell reaches 10V
Depth of discharge (DoD)	100%	Batteries can be discharged to 100% of the rated capacity
Standard charge current	30A	0.2C
Charging time	Approximately 4-5 hours	When charging from low voltage cut-off point
Internal resistance	≤20mQ	
Maximum charge current	150A	
Max continuous discharge current	200A	1C
Peak discharge current	300A	2C (5 seconds)
Operating Power Consumption	≤25mA	
Operating temperatures	Charge 0°C〜55°C (Ambient) Discharge -20°C〜60°C (Ambient) Storage -20°C ~ 60°C	
Storage temperature range	Within 2 months: -20°C ~ 60°C, Within 6 months: -10°C ~ 35°C	
Recommended storage temperature	20°C +- 5°C	Battery should be kept at -20°C ~ 45°C where it's dry, clean and well-ventilated.
Storage humidity range	10% – 90% RH	
Recommended storage duration	Charge to 13.3V OR 40-60% SOC every 6 months	
Connectivity	Bluetooth	
Connecting Terminals Pos (+) & Neg (-)	M8	
Cell over-charge protection	3.75V +- 0.05V	
Cell over-discharge protection	2.5V +- 0.05V	
Charging over current protection	155A +- 5A (10s)	
Discharging over current protection	1st 205A +- 5A (10s), 2nd 320A +- 10A (3s +- 1s)	
Short circuit protection	12400A +- 2000A (560 +- 340us)	

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