

| Item | Specification | Description/Remark |
|---|---|--|
| Model | AT-LFP-24-150-BTCV03 | 24V 150Ah / 100A Continuous Discharge + Bluetooth & Data Comms LiFePO4 Battery |
| Chemistry | Lithium Iron Phosphate (LiFePO4) | |
| Battery dimensions | L-500mm x W-270mm x H-220mm | L x W x H |
| Weight | 31kg | |
| Cell type | 3.2V 75Ah Prismatic cells | |
| Battery module | 16 pcs 3.2V 75Ah cells, 2 parallel and 8 serial | |
| Casing material for single cell | Aluminium | |
| Standard capacity (0.2C5A) | 24V 150Ah / 3840Wh | |
| 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 | 25.6V | Working voltage per cell: 3.2V |
| Charge voltage | 28.8V | Max. charge voltage per cell: 3.60V |
| Cut-off voltage | 2.5V for lowest cell, Nominal 20V | Cut-off is triggered when the first cell reaches 2.50V |
| Depth of discharge (DoD) | 100% | Batteries can be discharged to 100% of the rated capacity |
| Optimum charge current | 60A (0.4C) | Cell max voltage <3.9V |
| Charging time | Approximately 3 hours | When charging from low voltage cut-off point |
| Rapid charging | Max. charge current 100A (1C _{3A}) | Temperature increase falling within 15°C is normal. Over 15°C will affect the service life of the cells. |
| Max continuous discharge current | 100A | 0.67C |
| Peak discharge current | 200A | 0.33C (10 seconds) |
| Discharge performance in normal temperature | 30A (0.2C _{3A}) ≥ 100% 150A C _{3A} ≥90% | |
| Operating temperatures | Standard 0°C~45°C Discharge -20°C~65°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 ~ 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.