

# T SERIES LITHIUM BATTERY

## Lithium Battery Module

**12VDC 150Ah / 230Ah**



TBB's T Series lithium iron phosphate batteries deliver high performance across multiple applications.

Equipped with a built-in BMS, the T Series battery provides comprehensive protection against overcharging, over-discharging, and over-temperature conditions by monitoring each cell's status. This ensures enhanced safety and extends the battery's service life.

The integrated heating element automatically warms the battery cells during charging at low temperatures, ensuring reliable operation even in cold conditions.

With built-in Bluetooth connectivity, the T Series battery supports mobile app monitoring, offering convenient access to battery status and functions.

## Features

- Long cycle life: 4,000 cycles (0.5C charge/discharge, 80% DoD, @25°C) \*1
- Max discharge current: up to 150A for T12-150 and 200A for T12-230
- Specialized BMS with ultra-low consumption, allowing storage for 6 months after low-voltage protection
- Integrated automatic passive balancing ensures cell consistency and long-term reliability
- Built-in comprehensive protection to ensure battery safety
- Built-in heating element: automatically warms the battery during low-temperature charging
- Self wake-up function for convenient, worry-free use
- Built-in Bluetooth connectivity for remote monitoring via mobile app
- IP67-rated housing designed for enhanced durability

\*1: Except T12-150

| Model                                    | T12-150                                             | T12-230                                                                          |
|------------------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------------|
| Cell Type                                | LiFePO4                                             |                                                                                  |
| Rated Capacity                           | 150Ah                                               | 230Ah                                                                            |
| Rated Power                              | 1.92kWh                                             | 2.94kWh                                                                          |
| Rated Voltage                            | 12.8V                                               |                                                                                  |
| Charging Voltage                         | 14.2V                                               |                                                                                  |
| Recommended Charging Current             | 75A                                                 | 115A                                                                             |
| Maximum Charging Current                 | 150A                                                | 150A                                                                             |
| Continuous Discharge Current             | 150A                                                | 150A                                                                             |
| Maximum Discharge Current                | 150A                                                | 200A* <sup>1</sup>                                                               |
| Cell Operating Temperature (Charging)    | 2°C~63°C                                            |                                                                                  |
| Cell Operating Temperature (Discharging) | -30°C~63°C                                          |                                                                                  |
| Storage Temperature Range (<1 Month)     | -20°C~45°C, 20%~80% SOC, <65% RH                    |                                                                                  |
| Storage Temperature Range (<6 Months)    | 0°C~35°C, 20%~80% SOC, <65% RH                      |                                                                                  |
| Operating Humidity Range                 | 5%~90% RH                                           |                                                                                  |
| Dimensions                               | 331mm*173mm*220mm                                   | 345mm*190mm*245mm (housing)<br>384mm*194mm*248mm<br>(terminals/handles included) |
| Weight                                   | 16.5kg                                              | 22.0kg                                                                           |
| IP Protection                            | IP67                                                |                                                                                  |
| Certifications                           | CE, UN38.3, E-Mark                                  |                                                                                  |
| Shipping Class                           | UN3480                                              |                                                                                  |
| Cycle Life                               | 2500 (0.5C charge and discharge,<br>80% DoD, @25°C) | 4000 (0.5C charge and discharge,<br>80% DoD, @25°C)                              |
| Heating Element                          | YES                                                 |                                                                                  |
| Bluetooth                                | Integrated (BLE 5.0)                                |                                                                                  |
| Parallel/Series Connection               | Not supported                                       |                                                                                  |

\*1: At 25°C: 200A DC load for 26 minutes; inverter load 2000VA + 50A DC load for 16 minutes.