

# PR-BAT-T48150-3U

## Lithium Battery 48V 150A

# PROSE



Photo for Reference

## Part Number

|                  |                              |
|------------------|------------------------------|
| PR-BAT-T48150-3U | Lithium battery 48V 150A, 3U |
|------------------|------------------------------|

## Features

| Features                                                                    |                                                                                                                                                                                 |
|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Longer Cycle Life                                                           | Offers up to 10 times longer cycle life and 5 times longer float/calendar life than lead acid battery, helping to minimize replacement cost and reduce total cost of ownership. |
| Lighter Weight                                                              | About 40% of the weight of a comparable lead acid battery, A "drop in" replacement for lead acid battery.                                                                       |
| Higher Power                                                                | Delivers twice power of lead acid battery, even high discharge rate, while maintain high energy capacity.                                                                       |
| Wider Temperature Range                                                     | -10°C~55°C.                                                                                                                                                                     |
| Superior Safety                                                             | Lithium iron phosphate chemistry eliminates the risk of explosion or combustion due to high impact, over charging or short circuit situation.                                   |
| No Memory Effect                                                            | Support unstable partial state of charge (UPSOC) (charge/discharge) utilization.                                                                                                |
| Function                                                                    |                                                                                                                                                                                 |
| OVP, UVP, OTP, OCP, SCP.                                                    |                                                                                                                                                                                 |
| Self-management on charging and discharging, single cell balancing function |                                                                                                                                                                                 |
| Supports communication with equipment over RS485/CAN.                       |                                                                                                                                                                                 |
| Intelligent design, supports battery upgrade over RS232.                    |                                                                                                                                                                                 |
| Colorful LCD, displays battery information                                  |                                                                                                                                                                                 |
| Qualifications                                                              |                                                                                                                                                                                 |
| ISO9001, ISO14001, ISO45001, UL1642, CE,, ROHS, IEC62619, IEC62620, UN38.3  |                                                                                                                                                                                 |

## Mechanical data

|                                   |                            |
|-----------------------------------|----------------------------|
| Nominal Voltage                   | 48V                        |
| Nominal Capacity                  | 150Ah (25°C, 0.2C)         |
| Energy                            | 7200Wh                     |
| Internal Resistance (ACR)         | ≤30mΩ                      |
| Cycle Life                        | ≥5000 cycles (@25°C 0.2C)  |
| Design Life                       | ≥10 years @25°C            |
| Self-Discharge (30 days)          | ≤5% @25°C                  |
| Efficiency of Charge              | ≥98%                       |
| Efficiency of Discharge           | ≥100% @ 0.2C               |
|                                   | ≥96% @ 0.5C                |
| Max. Continuous Charge Current    | 100A                       |
| Max. Continuous Discharge Current | 100A                       |
| Discharge Cut-off Voltage         | ≤43.5V                     |
| Water Dust Resistance             | IP20                       |
| Case                              | Iron (Insulation painting) |
| Dimension, mm (W*D*H)             | 442*560*133mm              |
| Max. Weight                       | 60 kg                      |
| Min. Gravimetric Specific energy  | 120Wh/kg                   |
| Parallel in maximum               | 15pcs                      |

## Working Environment

|                               |                                    |
|-------------------------------|------------------------------------|
| Charge Temperature Range      | 0°C~55°C                           |
| Discharge Temperature Range   | -20°C~60°C                         |
| Optimum Operation Temperature | 10°C~35°C                          |
| Storage Temperature           | -10°C~35°C, ≤85% Relative Humidity |

## General Functions

|                                 |                                                                                                         |
|---------------------------------|---------------------------------------------------------------------------------------------------------|
| Parallel Communication          | RS485/CAN                                                                                               |
| Battery with Equipment          | RS485/CAN                                                                                               |
| Battery Debugging Communication | RS232                                                                                                   |
| SOC Light                       | 4 * LED                                                                                                 |
| Charge Current limit            | When the charging current exceeds the set value, turn on the current limit and limit the current to 20A |

## Additional Functions

|                      |                                                                                                                     |
|----------------------|---------------------------------------------------------------------------------------------------------------------|
| LCD Scree            | Yes, displays the battery status                                                                                    |
| SNMP                 | Yes                                                                                                                 |
| Gyroscope anti-theft | Keep battery tilt more than 15° to turn on anti-theft                                                               |
| Buzzer               | Yes                                                                                                                 |
| Dry Contact          | PIN1 to PIN2: Normally open, closed during low power<br>PIN3 to PIN4: Normally open, closed during fault protection |