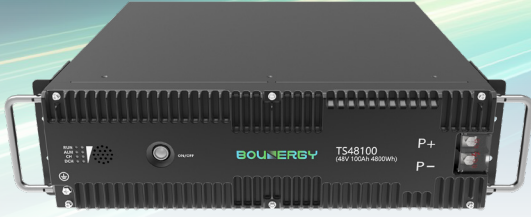


# TS48100

## Telecom Smart Li-Battery



- + High efficiency DC/DC power conversion technology
- + Bidirectional boost/buck circuit technology
- + Constant 48V voltage output in long distance
- + Safe LFP chemistry technology
- + Parallel with existing batteries to save investment
- + Support maximum 32 sets in parallel connection

[TS48100]

### Technical Parameters

|  |                          |
|--|--------------------------|
| Nominal Voltage (V)                    | 48                       |
| Nominal Capacity (A)                   | 100                      |
| Total Energy (kWh)                     | 4.8                      |
| Operating Voltage Range (V)            | 40.5 ~ 54.74             |
| Discharge Ending Voltage (V)           | 40.5                     |
| Charge Limited Voltage (V)             | 54.75                    |
| Maximum Charge/Discharge Voltage (V)   | 58                       |
| Standard Charge/Discharge Capacity (A) | 33 CH / 50 DCH           |
| Maximum Charge/Discharge Capacity (A)  | 80 CH/ 80 DCH            |
| Max Continuous Output Power (W)        | 4800                     |
| Cell Connection                        | 15S                      |
| Protection Rating                      | IP 30                    |
| Cycle Life                             | > 3500 cycles @ 80% DOD  |
| Communication                          | RS485, CAN               |
| Safety Standards                       | IEC62619, UL1973, UN38.3 |

### General Data

|                |   |
|----------------|---|
| Dimension (mm) | W442 * D450 * H133  |
| Weight (kg)    | 43  |
| Material       | LiFePO <sub>4</sub>   |
| Design Life    | ≥ 10 years  |
| Outer Package  | Black aluminum and sheet metal case (battery rack or cabinet is optional) |





## Environmental Specification

|                            |          |
|----------------------------|----------|
| Storage Temperature (°C)   | -20 ~ 60 |
| Transport Temperature (°C) | -20 ~ 60 |
| Charge Temperature (°C)    | 0 ~ 55   |
| Discharge Temperature (°C) | -20 ~ 60 |
| Relative Humidity          | 5 ~ 95%  |

## Discharging Diagram

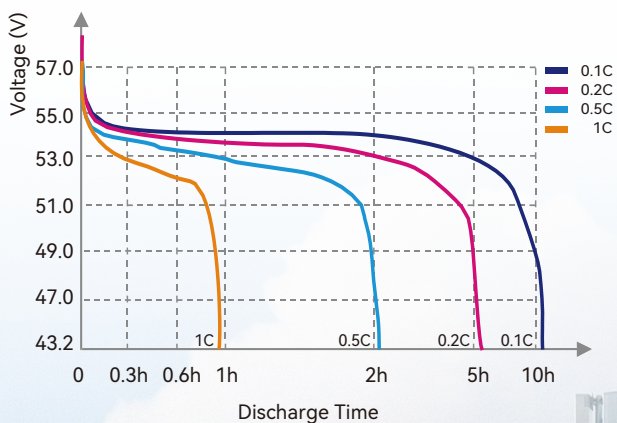
| Constant Current Discharge Table (Amperes) at 25°C |  | End of discharge voltage 37.5V |      |      |     |     |
|--|--|--------------------------------|------|------|-----|-----|
| Time (h)   |  | 1                              | 2    | 3    | 5   | 10  |
| Constant Current (A)                               |  | NA                             | 49   | 33   | 20  | 10  |
| Constant Power Discharge Table (Watts) at 25°C     |  | End of discharge voltage 37.5V |      |      |     |     |
| Time (h)   |  | 1.2                            | 2    | 3    | 5   | 10  |
| Constant Power (W)                                 |  | 4000                           | 2400 | 1600 | 940 | 475 |

Notes:

When the battery pack is idle for a long time, please keep its power level at about 50%; When the battery pack needs long-term storage or idleness, it should be recharged every three months, and the power level is maintained at about 50%.

Please keep the battery pack in a dry and ventilated place, avoid contact with corrosive substances, and keep away from fire and heat sources.

Discharge time curves at different rates@ 25°C



Different DOD Discharge Cycle Life Curve (0.5C)

