

TRLiF-4812C (48V12Ah)

Rechargeable Li-ion Battery-Industrial Battery-LFP Series



Product Features

-  **Cylindrical LFePO₄ cell-32700 (3.2V 6~6.3Ah), higher reliability**
-  **Longer cycle life 3500 cycles@80%DOD.**
-  **Fully replaceable with current batteries (Lead-acid, Ni-Cd)**
-  **Built-in BMS management system with interface RS485/RS232**
-  **Maintenance free with standard 19" design easy installation**
-  **Optimum adaptation to variety applications with series & parallel expansion support**

Product Application



Nominal Characteristics

| | |
|--------------------------------|---|
| Nominal Voltage | 51.2V |
| Nominal Capacity (@0.2C) | 12Ah (16S2P) |
| Nominal Energy | 614.4Wh |
| Internal Resistance | 150mΩ |
| Self Discharge Rate | ≤3.5% per month |
| Cycle Life (@25°C,0.2C,80%DOD) | 3500 Cycles |
| Parallel Connected Function | Max. 16 groups in parallel, recommended ≤ 12 groups |
| Series Connected Function | Not supported |

Charging Specifications

| | |
|------------------------------|-----------|
| Recommended Charging Voltage | 56V~57.6V |
| Max. Charging Current | 5A |

Discharging Specifications

| | |
|-------------------------------------|----------|
| Discharging Cut-off Voltage | 44.8V |
| Max. Discharging Continuous Current | 10A |
| Max. Discharging Peak Current | 12A, <3S |

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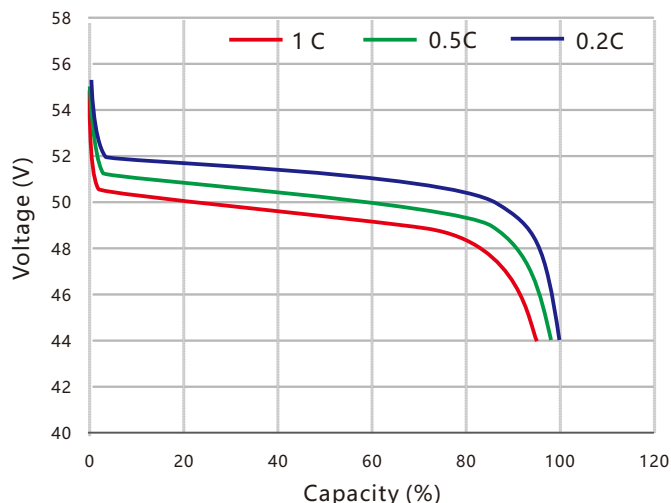
Mechanical Characteristics

| | |
|-------------------------|-------------------------------|
| Width | 483mm (19" Rack mounted type) |
| Depth | 373mm |
| Height | 44mm (1U) |
| Weight | 9.2Kg |
| Communication Interface | RS485/RS232 |

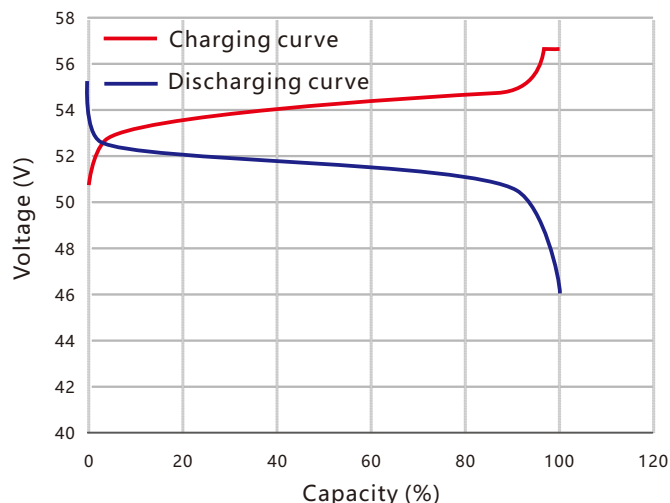
Operating Conditions

| | |
|-----------------------|-------------------------|
| Charge Temperature | 0°C~45°C (32°F~113°F) |
| Discharge Temperature | -20°C~60°C (-4°F~140°F) |
| Storage Temperature | 0°C~45°C (32°F~113°F) |
| Safety Standard | UL 1642 at cell level |
| Water Dust Resistance | IP30 |

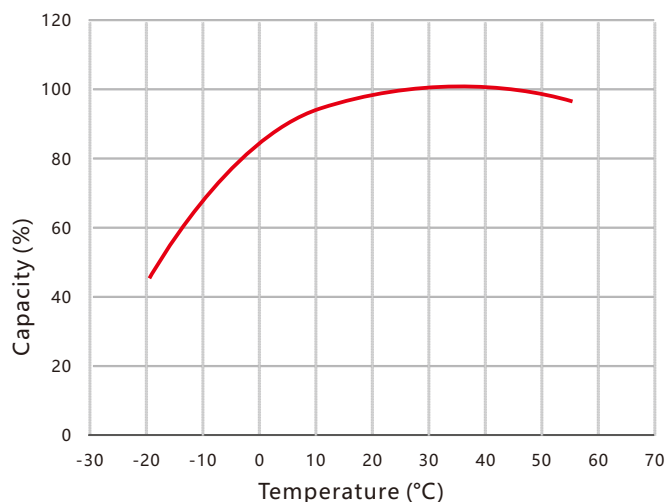
Rating Performance @25°C



Discharge and Charge @25°C, 0.2C



Capacity under different Temp.



Cycle Life under different Temp.

