# Taiace LiFePO4 48V100Ah for Telecom Use

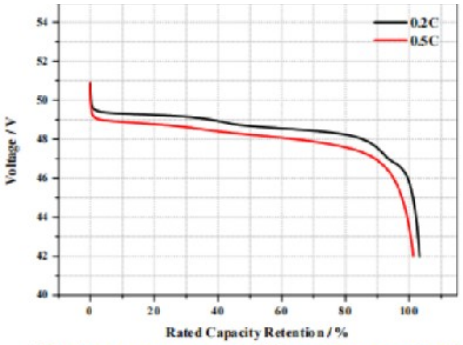

Functions of Battery
- OVP, UVP, OTP, OCP, SCP.
- Self-management on charging and discharging,single cell balancing function.
- Supports communication with equipment over RS485.
- Intelligent design,supports battery upgrade over RS232.
- Colorful LCD,displays battery information

## Features of LiFePO4 Battery

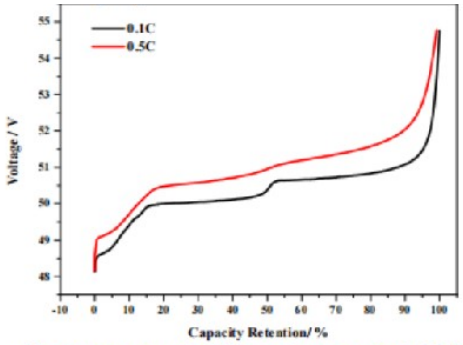
- Longer Cycle Life: Offers up to 10 times longer cycle life and 5 times longer float/calendar life than lead acid battery, helping to minimize replacement cost and reduce total cost of ownership.
- Lighter Weight: About 40% of the weight of a comparable lead acid battery, A ” drop-in” replacement for 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℃~55℃.
- 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.

***Qualifications***

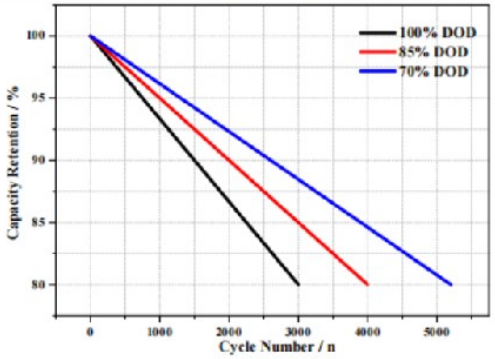
- *20 years professional experience on lithium-ion battery power designing, manufacturing, sales*
- *Passed ISO9001, ISO14001, ISO45001, UL1642, CE, ROHS, IEC62619, IEC62620, UN38.3*
- *Battery cell cost advantage*




Discharge curves at different currents @ 25°C




Charge curves at different currents @ 25°C




Life cycle at different DOD

Taiace

Specification

| | Model | T48100-3.5U |
|---|---|---|
| General Data | Nominal Voltage | 48V |
| | Nominal Capacity | 100Ah |
| | Energy | 4800Wh |
| | Internal Resistance (ACR) | ≤30mΩ |
| | Cycle Life | ≥4000 cycles（25℃ 85%DOD） |
| | Design Life | ≥10 years @25℃ |
| | Self-Discharge (30 days) | ≤5% @25℃ |
| | Efficiency of Charge | ≥98% |
| | Efficiency of Discharge | ≥100% @ 0.2C |
| | | ≥96% @ 0.5C |
| | Charge Mode | 0.2C to 54V, then 54V charge current to 0.02C (CC/CV) |
| | Max. Continuous Charge Current | 100A |
| | Max. Continuous Discharge Current | 100A |
| | Discharge Cut-off Voltage | ≤43.5V |
| | Water Dust Resistance | IP20 |
| | Case | Iron (Insulation painting) |
| | Dimensions（W*D*H） | 442*450*156mm |
| | Max. Weight | ≤41kg |
| | Min. Gravimetric Specific energy | ≥117Wh/kg |
| | Parallel in maximum | 15pcs |
| Operating Environme | Charge Temperature Range | 0℃~45℃ |
| | Discharge Temperature Range | -10℃~55℃ |
| | Optimum Operation Temperature | 10℃~35℃ |
| | Storage Temperature | -10℃~35℃ |
| | | ≤85% Relative Humidity |
| General Functions | Parallel Communication | RS485 |
| | Battery with Equipment | RS485 |
| | 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 |
| Optional Functions | LCD Screen | ☑**Yes (**Displays the total voltage pack, cell voltage, temperature, BMS status,etc**)** |
| | | ☐No |
| | Gyroscope anti-theft | ☐Yes (Keep battery tilt more than 15° to turn on anti-theft) |
| | | ☑**No** |
| | Buzzer | ☐Yes ☑**No** |
| | Dry Contact | ☑**Yes**<br>PIN1 to PIN2: Normally Close, open during BMS is power off or unable to start by itself<br>PIN3 to PIN4: Normally Close, Open during BMS failure(charging MOS failure, discharging MOS failure, NTC failure),cell failure(low voltage, big difference among the cell voltages) |
| | | ☐No |

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