



100AH 12V LiFePO4 Battery

Technology

FEATURES:

- Smart BMS(Battery Management System)**
 Built-in BMS to protect the battery from overcharge, over temperature, over discharge, over current, low temperature and short circuit.
- Superior Thermal Stability & Safety**
 LiFePO4 chemistry resists thermal runaway and combustion risks, even under extreme conditions, ensuring unmatched operational safety for high-stress environments.
- Extended Cycle Life**
 With over 3,000-5,000 charge-discharge cycles (80% capacity retention), these batteries deliver long-term reliability, drastically reducing replacement frequency and lifecycle costs.
- High Energy Density**
 Compact and lightweight design maximizes energy storage capacity per unit, ideal for space-constrained applications
- Eco-Friendly Composition**
 Free from toxic heavy metals (e.g., cobalt, lead), LiFePO4 batteries align with global sustainability standards (RoHS compliant) and enable easier recycling.
- Low Self-Discharge Rate**
 Minimizing energy waste and ensuring readiness for seasonal or emergency use.
- Wide Temperature Tolerance**
 Performs reliably in extreme climates (-20°C to 55°C / -4°F to 131°F), making it adaptable for outdoor solar storage, marine, and automotive applications.
- Maintenance-Free Operation**
 No memory effect or routine upkeep required, reducing user intervention and total ownership costs.
- BCI Group 24 Size, Universal Fit**
 ECO-WORTHY 12V 100Ah is crafted to meet the BCI battery size standard "Group 24". It's also a perfect replacement for Group 24 lead-acid and AGM, SLA batteries. Just simply replace your Group24 battery without the hassle of modifying your existing electrical system or wiring.

| Lithium Iron Phosphate (LiFePO4) | |
|---------------------------------------|--|
| Nominal Voltage | 12.8V |
| Rated Capacity | 100Ah |
| Charge Method | CC/CV |
| Charge Voltage | 14.6V |
| Bulk/Absorption Voltage | 14.6V |
| BMS Balancing Voltage | Any cell voltage $\geq 3.45V$ Max Voltage difference between cells $> 30mV$ In Charging |
| Equalize Voltage | Not applicable |
| Float Voltage * | Not applicable |
| Temperature Compensation | No/Disable |
| Charge Cut-off Voltage | 14.6V |
| Discharge Cut-off Voltage | 10V |
| Recommended Charge Current | 50A |
| Recommended Discharge Current | 50A |
| Maximum Continuous Charge Current | 100A |
| Maximum Continuous Discharge Current | 100A |
| Peak Current | 120A(10s) |
| WiFi | No |
| Bluetooth | Yes |
| Communication | No |
| Self Heating | No |
| Waterproof Rating | IP65 |
| BMS Protection | <ul style="list-style-type: none"> Over and Low voltage Charge and Discharge Over current Short circuit High and Low temperature |
| Internal Resistance | $\leq 10m\Omega$ |
| BMS Leakage Current | $\leq 10mA$ |
| Charge Temperature Range | 32°F (0°C) to 131°F (55°C) |
| Discharge Temperature Range | -4°F (-20°C) to 131°F (55°C) |
| Storage Temperature 1 week | -4(-20°C) to 149°F (65°C) |
| Storage Temperature 1 month | -4°F (-20°C) to 113°F(40°C) |
| Storage Temperature 1 year | -4°F (-20°C) to 77°F (25°C) |
| Humidity Operating: | 5% to 90 % RH |
| Humidity Storage: | 35% to 85% RH |
| Certifications: MSDS; UN38.3; CE; PSE | |
| Cycle Life | 4000 cycles |

Max connected
in Parallel
4 units

Max connected
in Series
4 units

Unit Dimensions

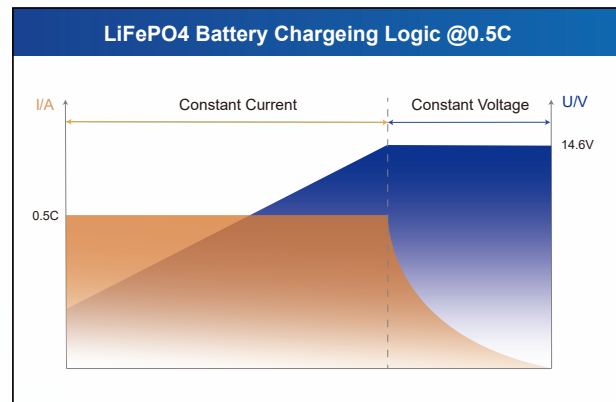
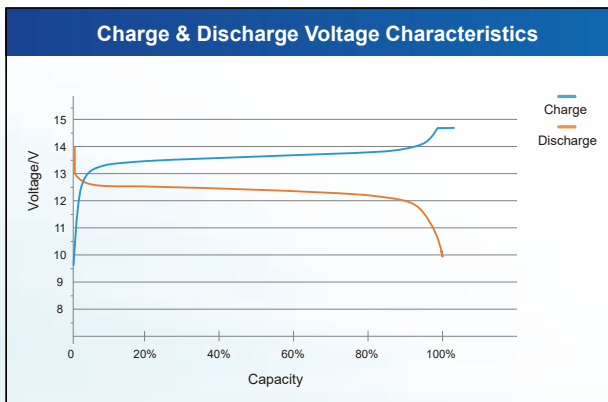
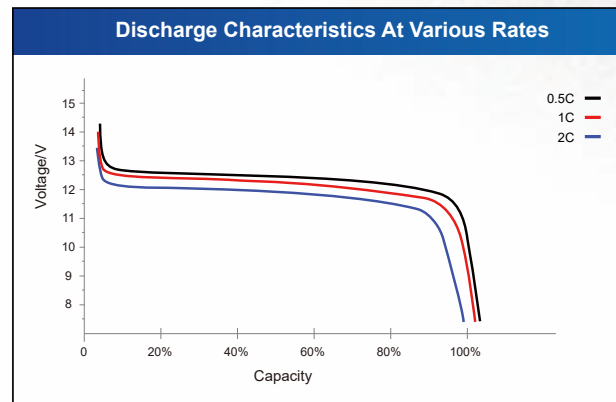
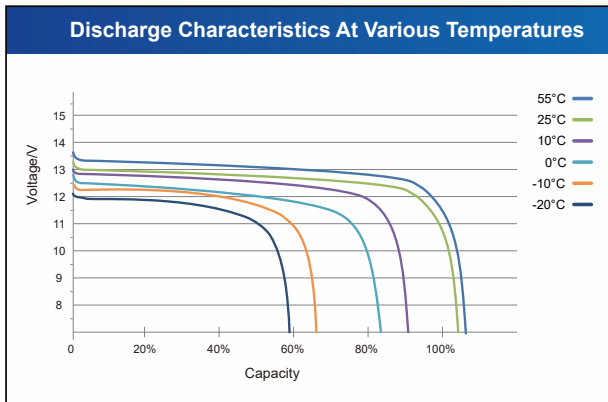


Mechanical

| | |
|-----------|--------------------|
| Length | 10.24 in / 260 mm |
| Width | 6.61 in / 168 mm |
| Height | 8.43 in / 214 mm |
| Weight | 25.5 lbs / 11.6 kg |
| Terminals | M8 insert |

Materials

| | |
|----------------|-------|
| Case and Cover | ABS |
| Color | BLACK |



PLEASE NOTE

- ★ Lithium batteries ship under Class 9 Dangerous Goods PI 965 Section IA. Please contact your carrier company to determine their requirements for shipping. MSDS Sheets are available upon request.
- ★ Float charging is not applicable to lithium iron phosphate batteries, long-term float charging will accelerate battery aging or damage. If you have to set the float voltage for MPPT/PWM charge controller in solar system, we suggest to set it to (12V Battery)13.2V-13.6V, (24V Battery)26.4V-27.2V, (36V Battery)39.6V-40.8V, (48V Battery)52.8V-54.4V.