

**Li Time**

**LiFePO4**

**12V 100Ah**

**Smart**  **X** **Group 24**  
BLUETOOTH 5.0 and More

**PRODUCT** (100A BMS)

**MANUAL**

Lithium Iron Phosphate Battery(LiFePO4)

# PRODUCT OVERVIEW

## 12.8V 100AH BATTERY

Operating Voltage: 12.8V

Charging Voltage:  $14.4 \pm 0.2V$

Recommend Charge Current: 20A (0.2C)

Max Continuous Discharge Current: 100A

Max. Continuous Output Power: 1280W



M8\*1.25mm Positive Terminal

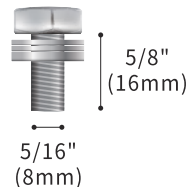
M8\*1.25mm Negative Terminal



# ADDITIONAL COMPONENTS

## M8- 5/8" (16mm) Terminal Bolts

The terminal bolts are used to secure multiple cable lugs to a single battery terminal. The bolts can be replaced with M8 bolts of other lengths based on actual needs.



## Insulating Caps for Bolts

# 24/7 MONITORING VIA LITIME APP

The LiTime 12V 100Ah Smart LiFePO4 battery, integrated with Bluetooth 5.0, enables accurate and effortless real-time tracking and management of the battery status.

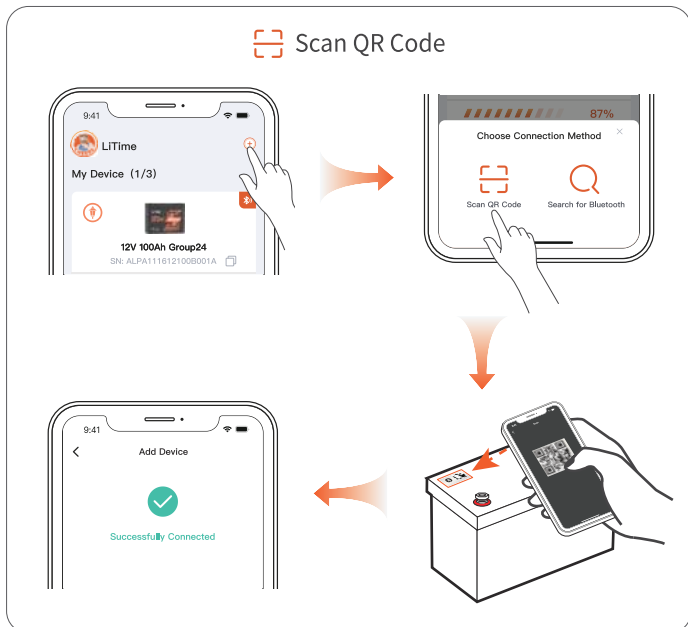
Step  
**1**

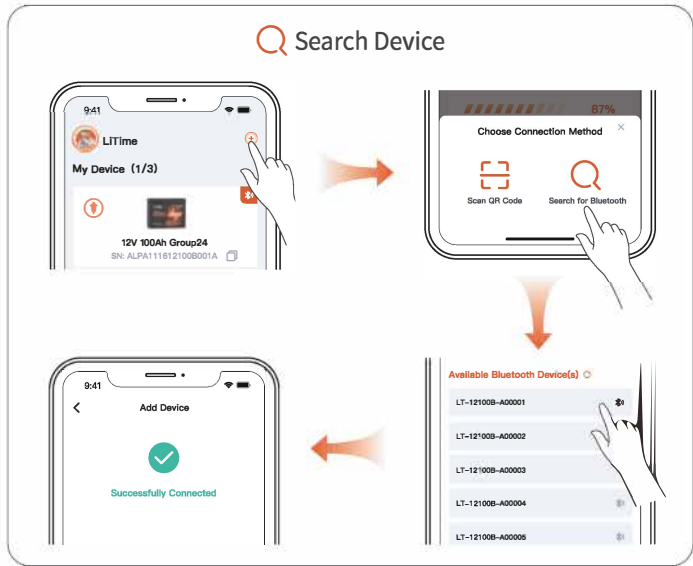
Download the LiTime APP and register your account.



Step  
**2**

Pair the battery with the LiTime APP and effortlessly keep track of the battery's real-time status.





## FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Orient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

# IMPORTANT SAFETY INSTRUCTION

**Please keep the battery away from heat sources, sparks, flames, and hazardous chemicals.**

**Maintain Adequate Ventilation and Heat Dissipation**

Place the battery in a well-ventilated area with sufficient heat dissipation to prevent overheating and damage.

**Size the Battery Cables and Connectors Appropriately**

Use high-stranded copper connectors and heavy gauge cables to handle possible battery loads. Make sure to keep identical cable lengths. Avoid accidents caused by unsuitable connectors or cables that make the connection a heat source during battery operation.

**Please tighten all cable connections, as loose cable connections can cause terminal meltdown or fire.**

**DO NOT puncture, drop, crush, burn, penetrate, shake, or strike the battery.**

The battery should be securely fastened during handling to prevent impact or dropping.

It should be safely secured to a solid plane and the cables safely tied to a suitable location to avoid arcing and sparking due to friction.

DO NOT press it by placing heavy stuff on top of it for long periods, which may damage it due to an internal short circuit.

**DO NOT immerse the battery in water whether the battery is in use or on standby.**

**DO NOT open, dismantle, or modify the battery.**

**DO NOT touch the exposed electrolyte or powder if the battery casing is damaged.**

**Uncovered electrolyte or powder that has contacted the skin or eyes MUST be flushed out with plenty of clean water immediately. Seek medical attention afterward.**

**Avoid Short Circuit**

Please use circuit breakers, fuses, or disconnects that have been properly sized by certified electricians, licensed installers, or regional code authorities to protect all the electrical equipment in your system. The battery has a built-in battery management system (BMS) that protects the battery cells from over-charge, over-discharge, and over-current, however this alone will not protect your system from severe electrical conditions.

**| Trained and certified technicians are required for safe and reliable installation. This product manual can only serve as a guideline as it cannot cover all possible scenarios.**

**| Verify Correct Polarity**

Please verify the polarity before connecting the wiring. Reverse polarity can and will destroy the battery and other electrical equipment. Use a multimeter to determine proper polarity.

**| Avoid Exposed Metal Terminals or Connectors**

The terminals of this battery are always live. Avoid exposed metal terminals or connectors; DO NOT place tools on the terminals or touch them with bare hands; DO NOT short circuit or use outside of specified electrical ratings.

**| DO NOT dispose of the battery as household waste. Please use recycling channels in accordance with local, state, and federal regulations.**

## **WARNING**

**| Batteries are potentially dangerous and proper precautions must be taken during operation and maintenance.**

**| Improper use of the battery can lead to battery failure or other potential damage.**

**| Improper configuration, installation, or use of related equipment in the battery system may damage the battery and other related equipment.**

**| Please wear proper personal protective equipment when working on the battery.**

**| Battery installation and maintenance must be performed by trained and certified technicians.**

**| Failure to follow the warnings above can result in potential damage.**

# BATTERY PARAMETERS

Cell Type	LiFePO4
Nominal Voltage	12.8V
Rated Capacity	100Ah
Energy	1280Wh
Internal Resistance	$\leq 40\text{m}\Omega$
Cycle Life	$\geq 4000$ times
Battery Management System (BMS) Board	100A
Charge Method	CC/CV
Charge Voltage	$14.4 \pm 0.2\text{V}$
Recommend Charge Current	20A (0.2C)
Max. Continuous Charge Current	100A
Max. Continuous Discharge Current	100A
Peak Discharge Current	500A@1 second
Max. Continuous Output Power	1280W

Dimension	L10.24*W6.61*H8.30 inch
	L260*W168*H211 mm
Housing Material	ABS (Flame Retardant Plastic)
Recommended Terminal Torque	106.2 to 123.9 inch·lbs / 12 to 14 N·m
Protection Class	IP65
Temperature Range	Charge: 0°C to 50°C / 32°F to 122°F
	Discharge: -20°C to 60°C / -4°F to 140°F
	Storage: -10°C to 50°C / 14°F to 122°F
Low Temperature Charging Protection (LTCP) Function <sup>①</sup>	Yes
Resume Charging Temperature Under LTCP	5°C/41°F (Battery Temperature)
FCC ID	2BDSV12V100

① The 12V 100Ah Group 24 Smart battery with Bluetooth supports Low Temperature Charging Protection (LTCP), where the BMS stops battery charging when the battery temperature falls below 0°C/32°F and resumes charging when the temperature rises above 5°C/41°F.