"TB Battery" APP -User Manual V01



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1.1 Home

"TB Battery" can be downloaded to smartphones from the IOS APP Store or Google's App Store. "TB Battery" is a software platform developed by Topband to manage lithium batteries. The platform integrates Bluetooth technology with lithium battery management software and is designed to view, monitor, manage, and control smart lithium batteries.

1.1.1 Device type

Device type	Specific type
	Smart battery
Battery	Air connection
	Wired connection
Communication box	Bridge
External Bluetooth module	Motive power

1.1.2 More setting

Company information : Display phone, email, official website, and

address information

- 1, Document: APP statement
- 2, language : Including Chinese, English, Germany, France
- 3 , Temp. unit : $^\circ\!\!\mathbb{C}$ & $^\circ\!\!\mathbb{F}$
- 4, APP version : APP current version



1.2 Smart battery

1.2.1 Search interface

Support fuzzy search device, display Bluetooth name, signal strength, (SOC, address available for T plus series batteries, not for other batteries)

1.2.2 Basic information

1.2.2.1 Device Overview Page

1. The Bluetooth name of the currently connected device;

2. SOC of equipment:

SOC<20%: icon in red

SOC>20%: icon is green

3. The health status of the device:

Perfect

Good: Good

4. Current status of the device:

Standby: No identification

Charging: Lightning symbol flashing

During discharge: the lightning sign remains on Heating: Heating icon

5. The usable time of the device

6. Current: positive charging value, negative discharging value

- 7. Capacity: Equipment design capacity
- 8. Voltage: Current voltage of the device
- 9. Power: Power=Voltage * Current
- 10. Temperature: device average temperature
- 11. Number of cycles: the number of times the device has been used

1.2.2.2 Logs Page

Right slide or click on "Logs" to enter the fault record page

1. Display the alarm & recovery record of the device







1.2.2.3 Detailed Information Interface

Right slide or click on "Detail" to enter the fault record page

- 1. Display battery failure
- 2. Display the voltage of a single battery cell

1.2.3 More

Click on "..." in the upper right corner to enter more interfaces

1.2.3.1 Equipment name

Enter password 1234 to modify the device name

1.2.3.2 Mac

Mac : Display the Mac address of current device

1.2.3.3 Battery software version

Display the battery firmware version of the current device. When a new firmware is detected on the device, a red dot will prompt the user to update the firmware.

Wired connection

1.2.4 Search interface

- 1. Support for fuzzy search devices
- 2. System List:

① Display connected systems: system name, system voltage, system current

② Click "+" to configure the system and save up to 6 systems

- 3 The switch can connect and disconnect the system
- ④ Up to 6 systems can be grouped
- 5 Delete key deletes the system
- 3. Device List

① Display the device Bluetooth name, signal strength, device address, and device SOC that can be searched.

 Connecting any device will automatically determine whether the settings are in the system;





1.2.5 Distribution Network Steps

1. Equipment operation:

① Wiring: When all batteries are turned off, perform physical serial and parallel connections first; Select the first battery as the host device, with the host battery's LINK OUT connected to the LINK IN of slave 1 and the LINK OUT of slave 1 connected to the LINK IN of slave 2; Take them one by one; Start the batteries in sequence;

② Address allocation: After pressing the reset button on the host battery for 10 s, the device indicator light starts running. After all the indicator lights are off, the address allocation is completed;

2. APP operation:

① Networking: Open the communication networking interface of the APP, click the "+"sign, set the system name, voltage platform, and serial parallel connection. After setting, click Next

② Connect Host: Click on Connect Host Battery, select the corresponding host, save, and the network distribution is successful; the device indicator light is constantly on

③ 12V system: 16P maximum at 1S, 4P maximum at 2/3/4S

 $\ensuremath{\text{24V}}$ system: cannot be connected in series, maximum 4P

36V system: cannot be connected in series, maximum 4P

48V system: cannot be connected in series, maximum 4P

1.2.6 System data

1.2.6.1 Summary Data Page

The name of the currently connected device;
SOC of equipment
SOC<20%: icon in red
SOC>20%: icon is green
Current state of the device
Standby: No identification
Charging: Lightning symbol flashing
During discharge: the lightning sign remains on
Heating icon
The usable time of the device





- 5. Current: positive charging value, negative discharging value
- 6. Capacity: Equipment design capacity
- 7. Voltage: Current voltage of the device
- 8. Temperature: maximum temperature, minimum temperature
- 9. Serial parallel number: the composition of the system

1.2.6.2 Fault Record Page

1、 Right slide or click on "Logs" to enter the fault record page

1. Display the alarm & recovery record of the system and locate which battery alarm is in the system

1.2.6.3 Mode page

Right slide or click on "Mode" to enter the page

1. The configuration of the display system: serial parallel relationship;

2. Display the SN code, SOC, and address of each device in the system;

3. Reconfigure: You can reselect the host to save the new system;

4. Release network: Release the system;

5. Click the single battery icon to enter the single battery information page to view the detailed parameters of the battery;

1.3 Air connection

1.3.1 Search interface

1. Support for fuzzy search devices

2. System List:

① Display saved system: system name, system voltage, system current

② Click "+" to configure the system and save up to 2 systems

- 3 The switch can connect and disconnect the system
- ④ Press frequently to delete the system
- 3. Device List

 Display the device Bluetooth name, signal strength, device address, and device SOC that can be searched for
Connecting any device will automatically redirect to the single battery information interface;

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1.3.2 Distribution Network Steps

1. Wiring: The battery is physically connected in series or parallel using power lines;

2. Networking: Open the air networking interface of the APP, click the+sign, set the system name, voltage platform, series or parallel connection, quantity, select the corresponding device Bluetooth name to the corresponding position of the APP, and the networking is successful;

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<	Configure net	work
System	name	Not set >
Voltage	platform	12V >
Connec	tion type	Series >
Device	number	1>

1.3.3 System data

1.3.3.1 Summary Data Page

1. The Bluetooth name of the currently connected device;

2. SOC of equipment

SOC<20%: icon in red

SOC>20%: icon is green

2. Current state of the device

Standby: No identification

Charging: Lightning symbol flashing

During discharge: the lightning sign remains on Heating: Heating icon

3. The usable time of the device

4. Current: positive charging value, negative discharging value

- 5. Capacity: Equipment design capacity
- 6. Voltage: Current voltage of the device
- 7. Temperature: maximum temperature, minimum temperature

8. Serial parallel number: the composition of the system



1.3.3.2 Composition page

Right stroke or click on "Composition Method" to enter the Composition Method page

9:41

1. The composition of the display system: serial parallel relationship;

2. Display the SN code, SOC, and address of each device in the system;

3. Reconfigure: You can reconnect the device to save the new system;

4. Unnetworking: Unnetworking the system;

5. Click the single battery icon to enter the single battery information page to view the detailed parameters of the battery;

1.4 **Communication box**

1.4.1 Search interface

Support fuzzy search device, display Bluetooth name, signal strength, (SOC, address (available for T-series batteries, not for other batteries)

1.4.2 Bridge

1.4.2.1 Summary Data Page

1. The Bluetooth name of the currently connected device;

2. SOC of equipment

SOC<20%: icon in red

SOC>20%: icon is green

3. Current state of the device

Standby: No identification

Charging: Lightning symbol flashing

During discharge: the lightning sign remains on Heating: Heating icon

4. The usable time of the device

5. Current: positive charging value, negative discharging value

- 6. Capacity: Equipment design capacity
- 7. Voltage: Current voltage of the device
- 8. Temperature: maximum temperature, minimum temperature
- 9. Serial parallel number: the composition of the system



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1.4.2.2 Mode

Right stroke or click on "Mode" to enter the page

- 1. The composition of the display system: serial parallel relationship;
- 2. Display the Mac address, SOC, and address of each device in the system;

3. Click the single battery icon to enter the single battery information page to view the detailed parameters of the battery;

1.4.2.3 Setting

Right slide or click on 'Setting' to enter the discovery page 1) This interface can display and sets the inverter protocol that the current box is compatible with

1.5 Bluetooth module

1.5.1 Search interface

Support fuzzy search device, display Bluetooth name, signal strength

1.5.2 Motive power module

1.5.2.1 Summary data interface

- 1. The Bluetooth name of the currently connected device;
- 2. SOC of equipment
- SOC<20%: icon in red
- SOC>20%: icon is green
- 3. Current state of the device
- Standby: No identification
- Charging: Lightning symbol flashing

During discharge: the lightning sign remains on Heating: Heating icon

- 4. The usable time of the device
- 5. Current: positive charging value, negative discharging alue
- value
 - 6. Capacity: Equipment design capacity
 - 7. Voltage: Current voltage of the device
- 8. Temperature: maximum temperature, minimum temperature
 - 9. Serial parallel number: the composition of the system







Right slide or click on "Logs" to enter the page 1. Display the alarm recovery record of the system and locate which battery alarm is in the system

1.5.2.3 Configuration Page

Right slide or click on "Detail" to enter the page

1. The configuration of the display system: serial parallel relationship;

2. Display the SN code, SOC of each device in the system;

3. Click the single battery icon to enter the single battery information interface to view the detailed parameters of the battery

1.5.2.4 Single Battery Information Page

1. SN code of the device

2. SOC of equipment

SOC<20%: icon in red

SOC>20%: icon is green

3. Current state of the device

Standby: No identification

Charging: Lightning symbol flashing

During discharge: the lightning sign remains on Heating: Heating icon

4. The usable time of the device

5. Current: positive charging value, negative discharging value

6. Capacity: Equipment design capacity

7. Voltage: Current voltage of the device

8. Power: The usage power of the device

9. Temperature: The average temperature of the device

10. Serial parallel number: the composition of the system

11. Single cell voltage: The voltage parameter of each cell

