



TZONE TZ-BT06 Bluetooth Low Energy Temperature & Humidity Data Logger User Manual

[Home](#) » [Tzone](#) » TZONE TZ-BT06 Bluetooth Low Energy Temperature & Humidity Data Logger User Manual 

T·ZONE

TZ-BT06
User Manual
V1.1



Contents

- [1 Product overview](#)
- [2 Product application](#)
- [3 Product features](#)
- [4 Product specification](#)
- [5 Caution](#)
- [6 Switch Instructions](#)
- [7 CD display description](#)
- [8 Battery status displays the description](#)
- [9 APP](#)
- [10 Documents / Resources](#)
 - [10.1 References](#)
- [11 Related Posts](#)

Product overview

TZ-BT06 is a Bluetooth Low Energy temperature&humidity data logger with the latest Bluetooth 5.0 technology. It can collect the temperature&humidity of the surrounding environment. Such data can be recorded as history data. BT06 can store up to 32000 pieces of the temperature&humidity data. when the long-range mode is enabled, the transmission distance is up to 300 meters, and the LCD screen can view the temperature&humidity data in real-time. Mobile phones with Bluetooth 4.0 or above can download and install App. It can store and monitor the temperature&humidity of the environment comprehensively. Its characteristics are small-sized, low-weighted, easily portable, and highly accurate for wide use in cold chain logistics, archives, labs, museums, etc.

Product application

1. Refrigerated storage and transportation;
2. Archives;
3. Experimental (test) rooms;
4. Workshop;
5. Museums;
6. Pharmaceutical environment;
7. Fresh transport.

Product features

1. High accuracy and stability;
2. Bluetooth 5.0;
3. Long-distance wireless transfer;
4. Built-in highly sensitive temperature&humidity sensor;
5. Real-time broadcast temperature&humidity can view the temperature&humidity in real-time on the LCD;
6. It can store 32000 pieces of temperature&humidity data(when the storage space is full, the first 256 pieces of data will be overwritten);
7. Enable long-range mode, the transmission distance is up to 300 meters
8. Can be set the scope of temperature&humidity alarm;
9. A history report can be sent to a specified email;
10. By pairing Bluetooth printer to print the data report;

11. Can by OTA update version.

Product specification

Item	Specification
Protocol standard	Bluetooth 5.0
Send interval	1S, adjustable
Built-in battery	620mAh /3V(replaceable)
Output power	4dBm, adjustable
Transmission distance	8dbm:(the biggest) 300 meters(long-range mode,only Bluetooth 5.0 or above is s 4dbm:(the default) 200 meters(long-range mode, only Bluetooth 5.0 or above is supported) 120 meters(Non-long range mode)

Storage	Can save 32000 temperature&humidity data
Operating temperature range	-20°C~ +60°C
Temperature detection accuracy	±0.3°C(-20~40°C),±0.5°C(other)
Temperature resolution	0.1°C
Operating Humidity range	0~90%RH
Humidity detection accuracy	±3%RH(10~90%),±5%(other)
Humidity resolution	0.1%RH
Record Interval	10min(10s~180h)
Alarm Range	Temperature alarm: 2°C~8°C, adjustable Humidity alarm: 40%~60%, adjustable
battery life	1 year
Protection grade	IP65
Net weight	40g
Outline size	86mm*48mm*12mm

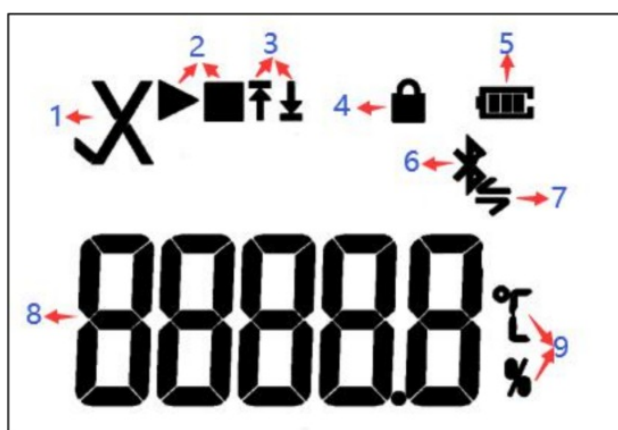
Caution

1. Being close to a metal object will interfere with the signal, causing the signal to be weakened;
2. Note the distance between TZ-BT06 and the receiver to guarantee the accuracy of receiving
3. Keep away from water and corrosive objects.

Switch Instructions

Device status	Operation	Instructions
Turn on	Under the unopened state, long press butt on for 3 seconds	Turn on the device, start to send the real-time ault. If the recording is disabled through the APP, a
Turn Off	Open state, long press the button for 3 se conds	Turn off the device
Switching broadcast m ode	Under unopened state and broadcast in lo ng-range mode, short press the“Start” button	The broadcast switched from long-range mod oadcast data for 15 seconds, then back to lon
Turn off	Open state, short press the “Stop” button	The broadcast is switched to a 0.5-second int o speed up the connection for 20 seconds, th





CD display description



NO.	Instructions	
1	√ OK × Alarm	
2	► Start recording ■ Stop recording	
3	Alarm zones ↑H1(high temperature &humidity alarm) ↓L1(Low temperature &humidity alarm)	
4	Password protected	
5	Remaining battery level	

Note: every 2 seconds will switch once the screen display, Temperature interface-> <- Humidity interface.

Battery status displays the description

Battery	Capacity
	Full
	Good
	Medium
	Lower (Please replace the battery)

APP

'Temp Logger' is a free mobile application provided by our company to the users, who can connect the BT06 through the Bluetooth of the mobile devices and do the settings, data transmission, recording, synchronization, and send to email. Apply the Bluetooth BLE way, so you can use the phone for temperature&humidity monitoring. The client can download App by scanning the QR code below:

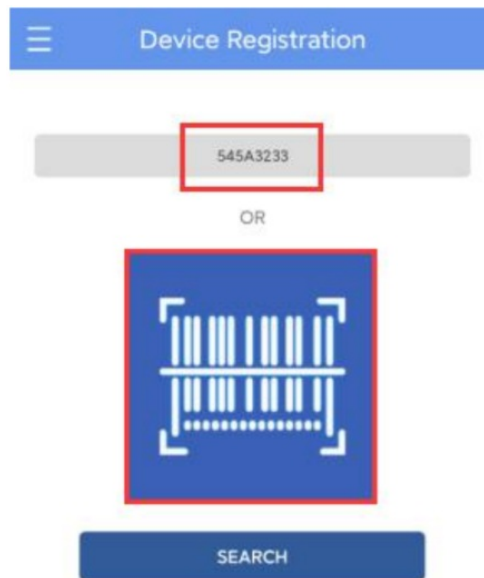
Android download: Scan the following QR code;



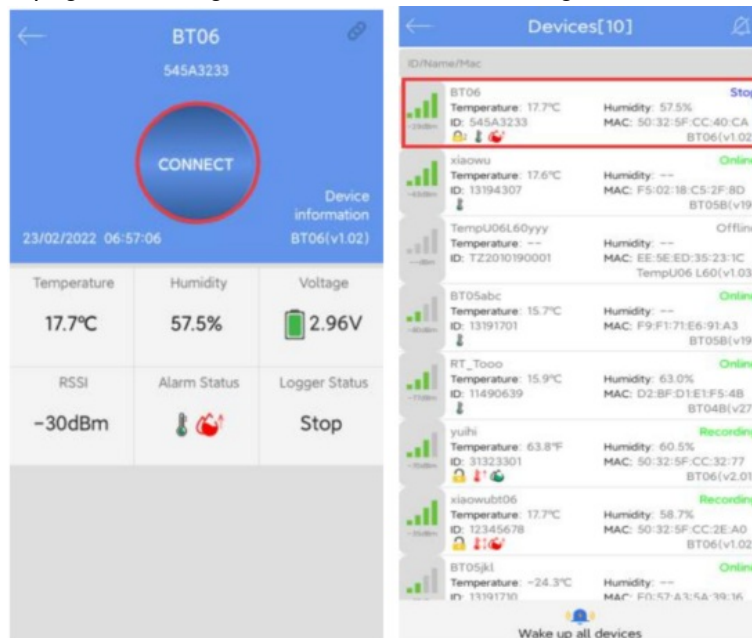
http://www.tzonedigital.com/app_download/btlogger_en-us.html

9.1 Device Registration

9.1.1 Open the APP, enter the device ID directly to register on the homepage, or scan the QR code to get the device ID, or do not enter any ID and directly click search to find the device.

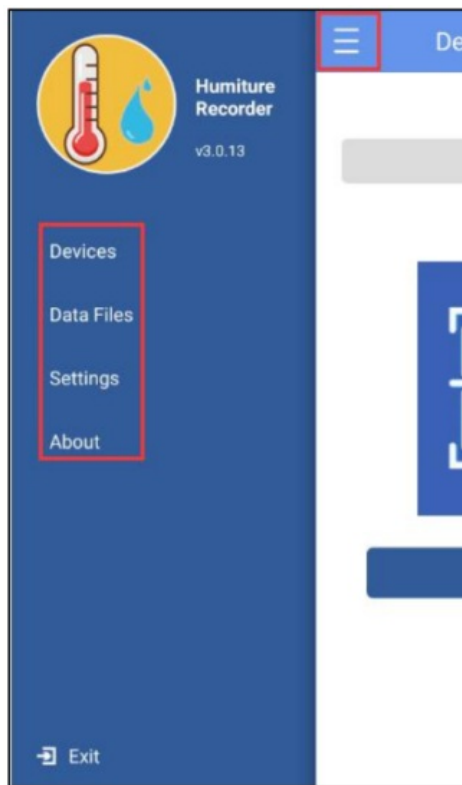


9.2.2 Enter the device connection page and click Connect. After a successful connection, the device ID will be displayed on the “Devices” page, indicating that the device has been registered successfully.



9.2 Device View

Click the icon in the upper left corner of the home screen to expand the main menu. You can select the menu function and click “device” to enter the multidevice interface. The functions of the device interface areas follows:











9.2.1 To view device information

The name, ID, MAC, temperature/humidity data, model, and status of all the current devices can be viewed, or you can view the specific device information by ID, name, and MAC.

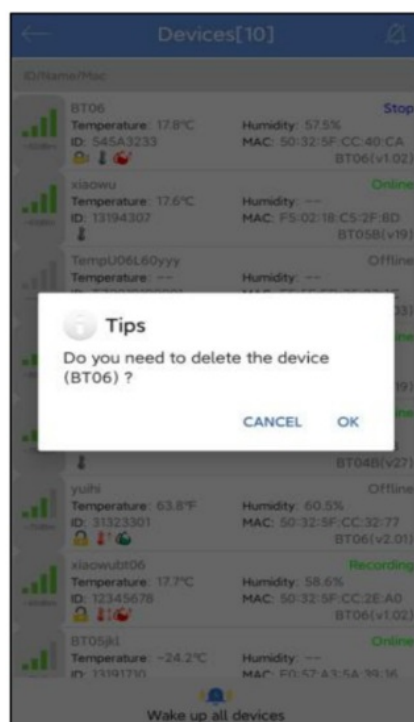
Devices[10]			
ID/Name/Mac			
	BT06 Temperature: 17.7°C ID: 545A3233 	Humidity: 57.5% MAC: 50:32:5F:CC:40:CA BT06(v1.02)	Stop
	xiaowu Temperature: 17.6°C ID: 13194307 	Humidity: -- MAC: F5:02:18:C5:2F:8D BT05B(v19)	Online
	TempU06L60yyy Temperature: -- ID: TZ2010190001	Humidity: -- MAC: EE:5E:ED:35:23:1C TempU06 L60(v1.03)	Offline
	BT05abc Temperature: 15.7°C ID: 13191701 	Humidity: -- MAC: F9:F1:71:E6:91:A3 BT05B(v19)	Online
	RT_Tooo Temperature: 15.9°C ID: 11490639 	Humidity: 63.0% MAC: D2:BF:D1:E1:F5:4B BT04B(v27)	Online
	yulhi Temperature: 63.8°F ID: 31323301 	Humidity: 60.5% MAC: 50:32:5F:CC:32:77 BT06(v2.01)	Recording
	xiaowubt06 Temperature: 17.7°C ID: 12345678 	Humidity: 58.7% MAC: 50:32:5F:CC:2E:A0 BT06(v1.02)	Recording
	BT05jkl Temperature: -24.3°C ID: 13191710	Humidity: -- MAC: F0:57:A3:5A:39:16	Online
Wake up all devices			

Status description of the device in different symbols:

Temperature icon display	Status	Humidity icon display
	Temperature normal	
	Upper-temperature alarm	
	Lower temperature alarm	
	Upper and lower temperature alarm	

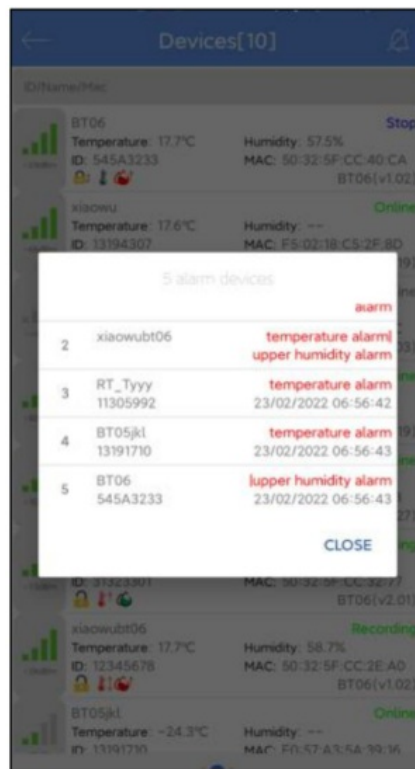
9.2.2 Delete the device:

Long press to delete the device:



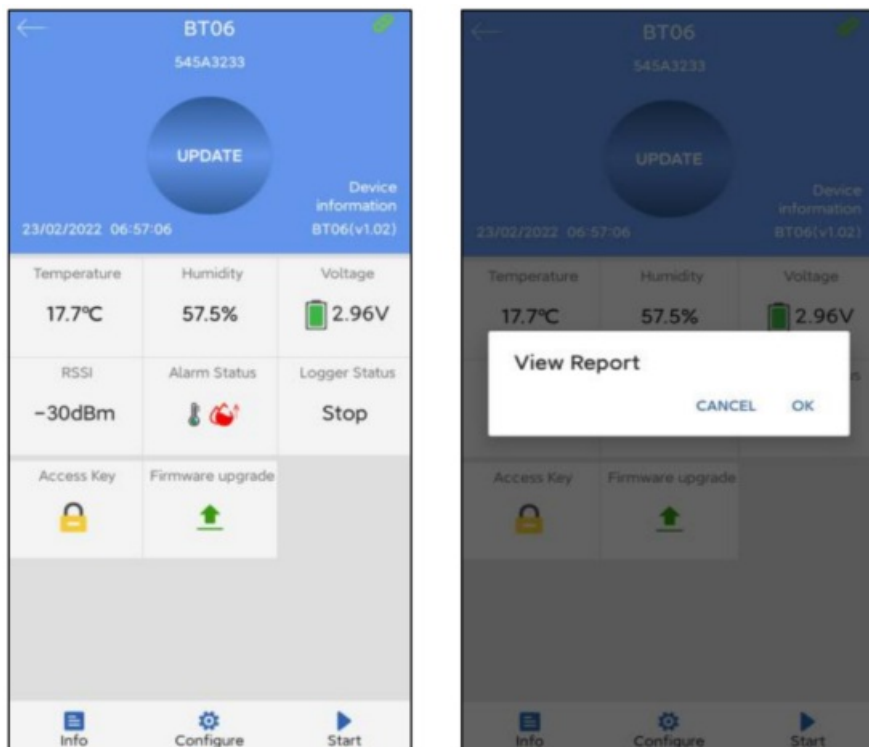
9.2.3 Device alarm:

When the device exceeds the preset upper or lower limit, the alarm information will be displayed, and the alarm bell will ring. Clicking "CLOSE" to turn off the alarm information and alarm bell.



9.3 Device connection

Click a single device quickly to enter the connection interface. It will display the temperature/humidity, voltage, RSSI, alarm status, and logger status of the device. Click “CONNECT,” and jump to update after the connection is successful, indicating that the device has been successfully connected and read the current data content. After the connection is successful, it will prompt you whether to view the report or the access key, and the flight mode of the device will be displayed. Four buttons will be displayed at the bottom of the interface:



Note: The device will not update the data in the connection process. By default, the device will be disconnected after 1 minute and the four buttons at the bottom will become gray and cannot be clicked again.

9.3.1 Device access key

Click “Access Key” to encrypt the device, and set the level-1 and level-2 access keys.

9.3.1 Firmware upgrade

The firmware upgrade function is disabled by default. If this function is enabled in System Settings, click Firmware Upgrade to upgrade the current version to the latest version. If the current version is the latest version, it cannot

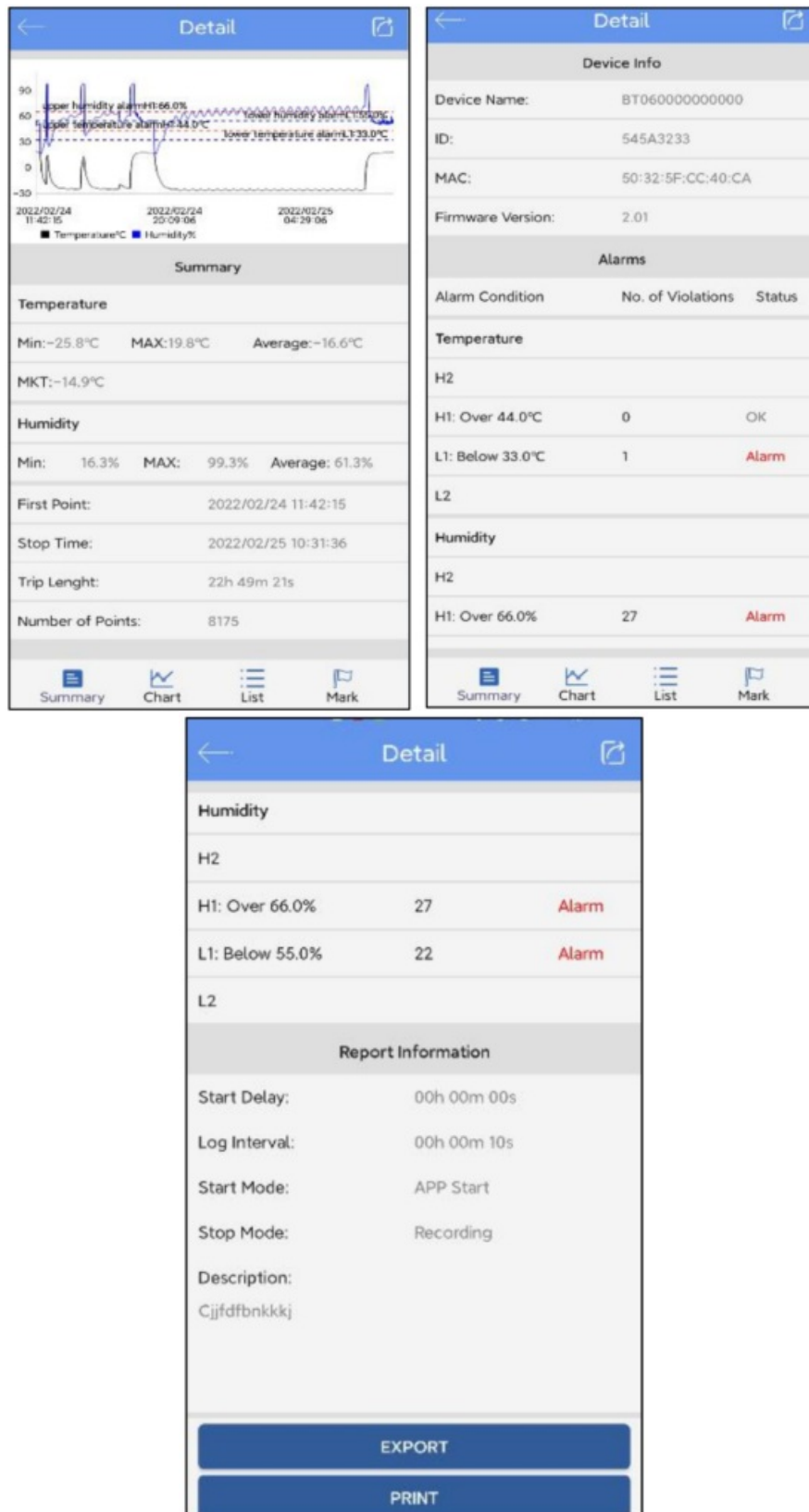
be upgraded.

Note: Please do not exit the APP interface during the upgrade process, otherwise the device may be damaged.

9.3.2 Detail and email function

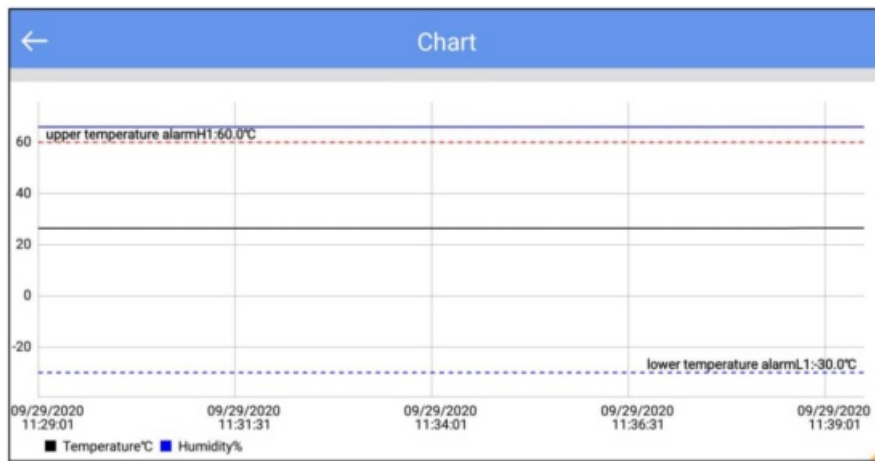
Click “Detail” to view all information reports on the device. Click “EXPORT” to generate PDF and CSV reports, and send the reports to the designated mailbox by email,click “Print” to automatically search the name of the Bluetooth printer. Click the name to automatically pair and print the data report.

A: Details summary



Note: The smartphone must have a mailbox APP and login account to send an email.

B: Chart:



C: List:

List			
NO.	DateTime	Temperature	Humidity
1	09/29/2020 11:29:01	26.4°C	66%
2	09/29/2020 11:29:16	26.4°C	66%
3	09/29/2020 11:29:31	26.4°C	66%
4	09/29/2020 11:29:46	26.4°C	66%
5	09/29/2020 11:30:01	26.4°C	66%
6	09/29/2020 11:30:16	26.4°C	66%
7	09/29/2020 11:30:31	26.4°C	66%
8	09/29/2020 11:30:46	26.4°C	66%
9	09/29/2020 11:31:01	26.4°C	66%
10	09/29/2020 11:31:16	26.4°C	66%
11	09/29/2020 11:31:31	26.4°C	66%
12	09/29/2020 11:31:46	26.4°C	66%
13	09/29/2020 11:32:01	26.4°C	66%
14	09/29/2020 11:32:16	26.4°C	66%
15	09/29/2020 11:32:31	26.4°C	66%

9.4 Configure device

After connection, when the device does not start recording, you can click “Configure” to set the device.

← Configure Device

BT06 545A3233

Device Name: BT06

Basic Settings

Broadcast Interval: 1 s

Transmit Power: +4 dBm

Long Range Mode: ☐

Logging Interval: 00 H 00 m 10 s

Logging Cycle: 3 Day

Advanced Settings

Access Key: ON >

Alarms

Alarms Alarm Setting >

Description

Save

9.4.1 Device name: The device name can be modified (up to 15byte) by users.

9.4.2 Basic settings:

A: Broadcast interval: The device broadcast interval (range: 0.5s ~30 s),

B: Transmission power: The device transmission power(range:-20dbm~8dbm, default:4dbm,-20dbm is the closest distance, 8dbm is the furthest distance).

C: Long-range mode: on/off(Note: if the long-range mode is on, the phone Bluetooth 5.0 is below unable to receive broadcast data).

D: Logging interval: Record time of the stored data (range:10s~18h, default:10mins).

E: Logging cycle: It changes with the logging interval.

9.4.3 Advanced settings

A: Access key: The password is configurable and disabled by default (Range: 6digits).

9.4.4 Alarms:

Temperature(Range: -20~60 °C)

H1: High-temperature limit:8°C

L1: Low-temperature limit:2°C

Humidity(Range: 0~100%)

H1: High humidity limit:60%

L1: Low humidity limit:40%

9.4.5 Description: You can set a description for this device (up to 56 characters).

Note: Click save, and historical data will be deleted.

9.5 Start/Stop recording

Can be started and stopped recorded by the start/stop button.

Note: Click save, and historical data will be deleted.

9.6 Data files

Click the "Data Files" menu bar to enter the data files interface. The functions of the device interface are as follows:

Data Files			
8	TZ2020022500	02/25/2021 12:03:28	<input type="checkbox"/>
9	TZ0120100008	02/22/2021 17:07:30	<input type="checkbox"/>
10	TZ0120010001	02/06/2021 17:31:36	<input type="checkbox"/>
11	20210002	02/06/2021 16:53:44	<input type="checkbox"/>
12	20210003	02/06/2021 16:34:34	<input type="checkbox"/>
13	20210003	02/06/2021 16:28:16	<input type="checkbox"/>
14	20210002	02/06/2021 16:17:29	<input type="checkbox"/>
15	20210002	02/06/2021 15:56:35	<input type="checkbox"/>
16	11491267	02/06/2021 12:26:43	<input type="checkbox"/>
17	13191706	02/06/2021 12:04:48	<input type="checkbox"/>
 Comparison		 Delete	

9.6.1 To View a single data file

The time displayed in this file is the time when the device data is read for the first time. The information will be updated after each reading until the machine stops recording.

9.6.2 Chart report comparison supporting up to 5 files

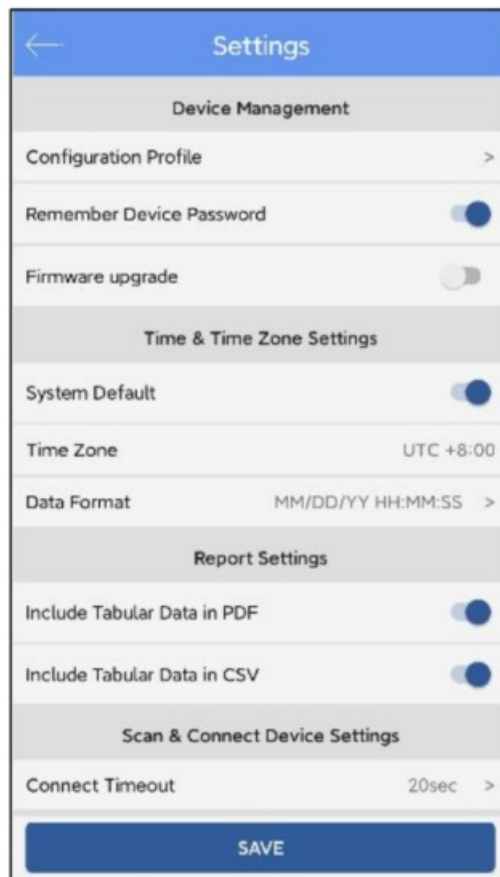
Check the data file and click “Comparison” to compare the temperature chart reports of different data files.

9.6.3 Delete data file

Check the data file and click “Delete” to delete the data file.

9.7 System setting

Click the “System setting” menu bar to enter the system setting interface. The functions of the system setting interface areas follows:



9.7.1 Device Management:

1. Configuration file: You can view the configuration file saved in "Configure".
2. Remember the device access key:
 Don't turn on the switch: enter the access key every time you connect the device
 Turn on the switch: when connecting the device, you only need to input the access key once (default: remember the key)
3. The firmware update:
 Don't turn on the switch: Firmware upgrades are not allowed
 Turn on the switch: After connection, there is a firmware upgrade function(default)

9.7.2 Time&Time zone Setting(Only for generating reports through the APP):

1. System default/Time Zone:
 Don't turn on the switch: is UTC time zone or another time zone as you choose
 Turn on the switch: is the current time zone of the system (default: system default)
2. Data Format: MM/DD/YY HH:MM: SS(default) or DD/MM/YY HH:MM: SS

9.7.3 Report settings(Only for generating reports through the APP):

1. Include Tabular Data in PDF: Select include or exclude (default: include).
2. Include Tabular Data in CSV: Select include or exclude (default: include).

9.7.4 Scan and connect device Settings:

A. Connection Timeout: If there is no connection within the specified time, it is considered a connection timeout(default: 20 seconds).

Documents / Resources

<div><div><div>TZ-BT06 User Manual</div><div><div><div></div></div><div><div></div></div></div><div><div><div>1 Product overview</div><div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div><div></div><div></div></div><div><div></div><div></div></div></div></div><div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div><div></div><div></div></div><div><div></div><div></div></div></div></div></div></div>	<div><div><div>TZONE TZ-BT06 Bluetooth Low Energy Temperature & Humidity Data Logger [pdf] User M</div><div>annual</div><div>TZ-BT06, Bluetooth Low Energy Temperature Humidity Data Logger</div></div></div>
--	---

References

[Manuals+.](#)