TZONE TZ-BT06 Bluetooth Temp and RH Data Logger User Manual

TZ-BT06 User Manual V1.2

Contents

Product overview

TZ-BT06 is Bluetooth Low Energy temperature&humidity data logger with the latest Bluetooth 5.0 technology. It can collect 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 phone with Bluetooth 4.0 or above can download and install App.It can store and monitor 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. History report can be sent to 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 supported) 150 meters(Non-long range mode)
	4dbm:(the default) 200 meters(long range mode,only Bluetooth 5.0 or above is supported) 120 meters(Non-long range mode)
Storage	Can be save 32000 temperature&humidity data
Operating temperature range	-20℃~ +60℃
Temperature detection accuracy	±0.3℃(-20~40℃),±0.5℃(other)
Temperature resolution	0.1℃
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℃~8℃,adjustable Humidity alarm: 40%~60%, adjustable
battery life	1 year
Protection grade	IP65
Net weight	40g
Outline size	86mm*48mm*12mm

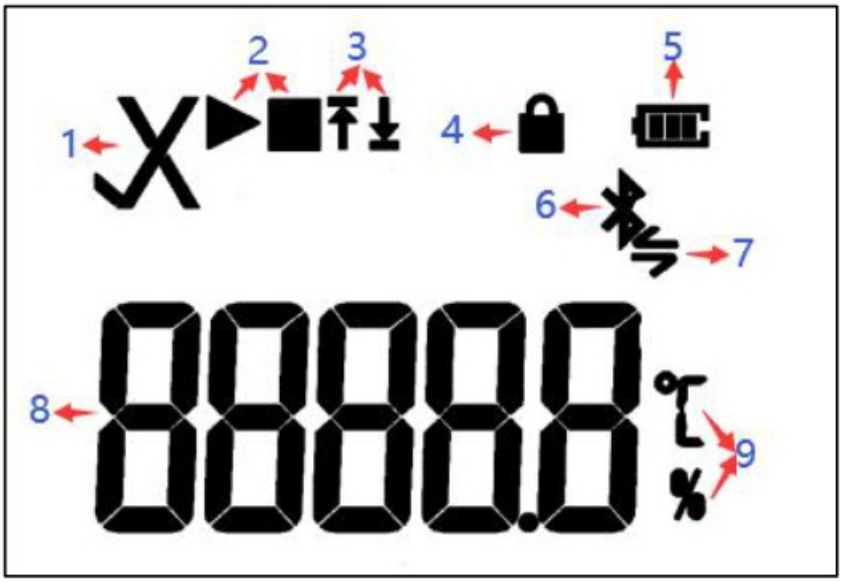
Caution

1. Being close to a metal object will interfere with the signal, causing the signal to be weaken;
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 unopened state, long press button for 3 seconds	Turn on the device, start send the real-time data,,then start record the data.(the recording is enabled by default. If the recording is disabled through the APP, also needs to be enabled through the APP)
Turn Off	Open state, long press the button for 3 seconds	Turn off the device
Switching broadcast Mode	Under unopened state and broadcast in long range mode,short press the“Start”button	The broadcast switch from long range mode to standard mode, support Bluetooth 5.0 or below to receive broadcast data for 15 seconds, then back to long range mode again
Turn off	Open state, short press the “Stop”button	The broadcast is switch to 0.5 second interval to speed up the connection for 20 seconds, then back to the preset broadcast interval

LCD display description



NO.	Instructions	NO.	Instructions
1	√ OK × Alarm	6	Bluetooth
2	▶ Start recording ■Stop recording	7	Bluetooth communicating
3	Alarm zones ↑H1(high temperature &humidity alarm) ↓L1(Low temperature &humidity alarm)	8	Temperature&Humidity
4	Password protected	9	℃ Temperature unit % Humidity unit
5	Remaining battery level		

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

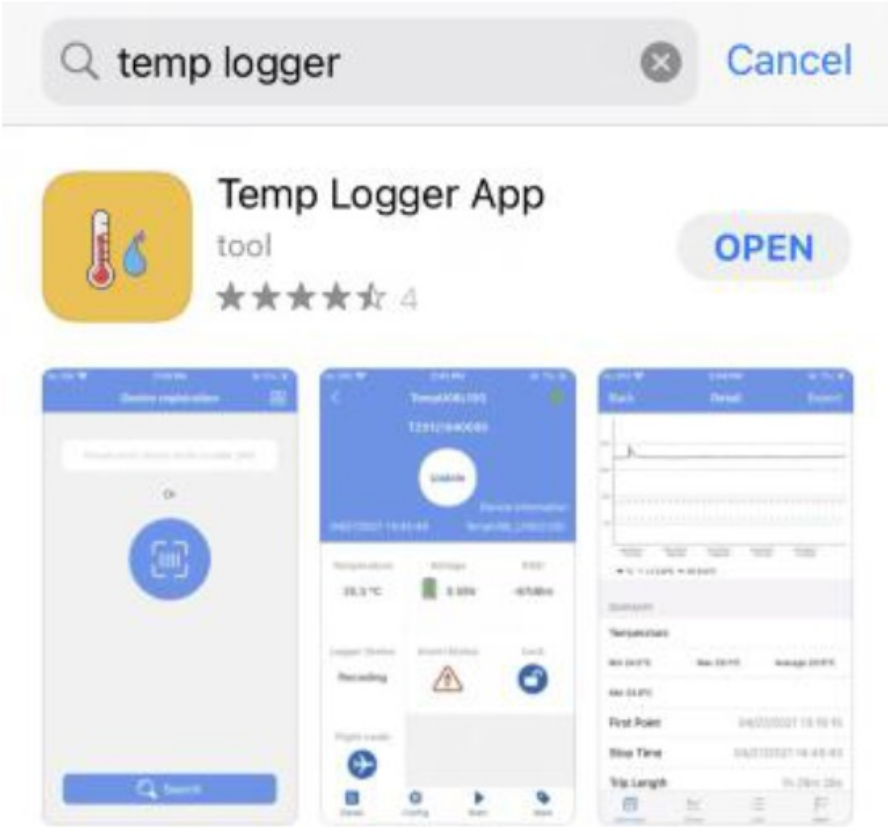
Battery status displays description

Battery	Capacity
	Full
	Good
	Medium
	Lower (Please replace battery)

APP

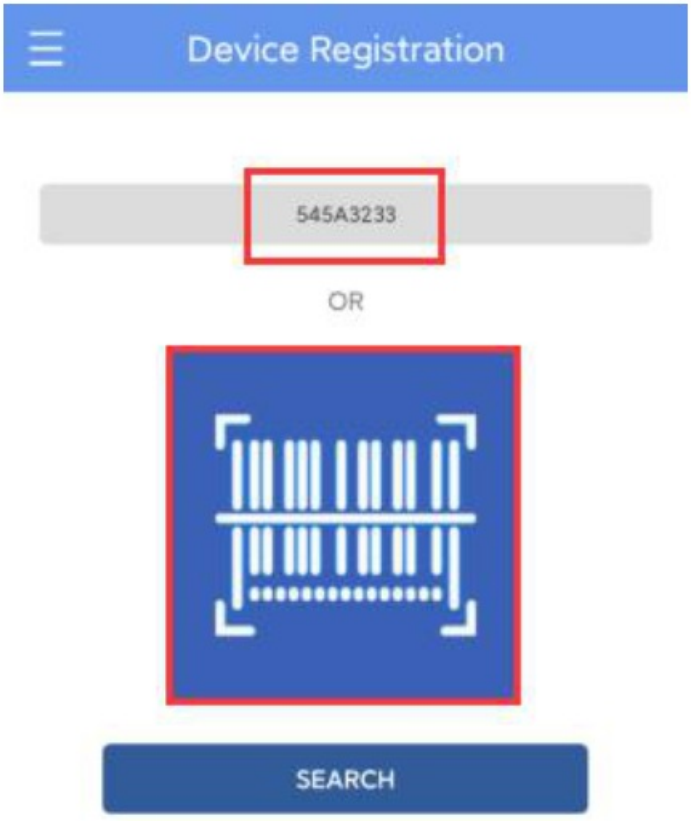
'Temp Logger' is a free mobile applications which provided by our company to the users, can connect the BT06 through the Bluetooth of the mobile devices and do the
settings,data transmission, recording, synchronization, send to email. Apply the Bluetooth BLE way, so you can use phone for temperature&humidity monitoring.
download the Android or IOS APP, please do as follows: Android download: Scan the following QR code;

IOS download:Into Apple APP Store and type " Temp Logger App"

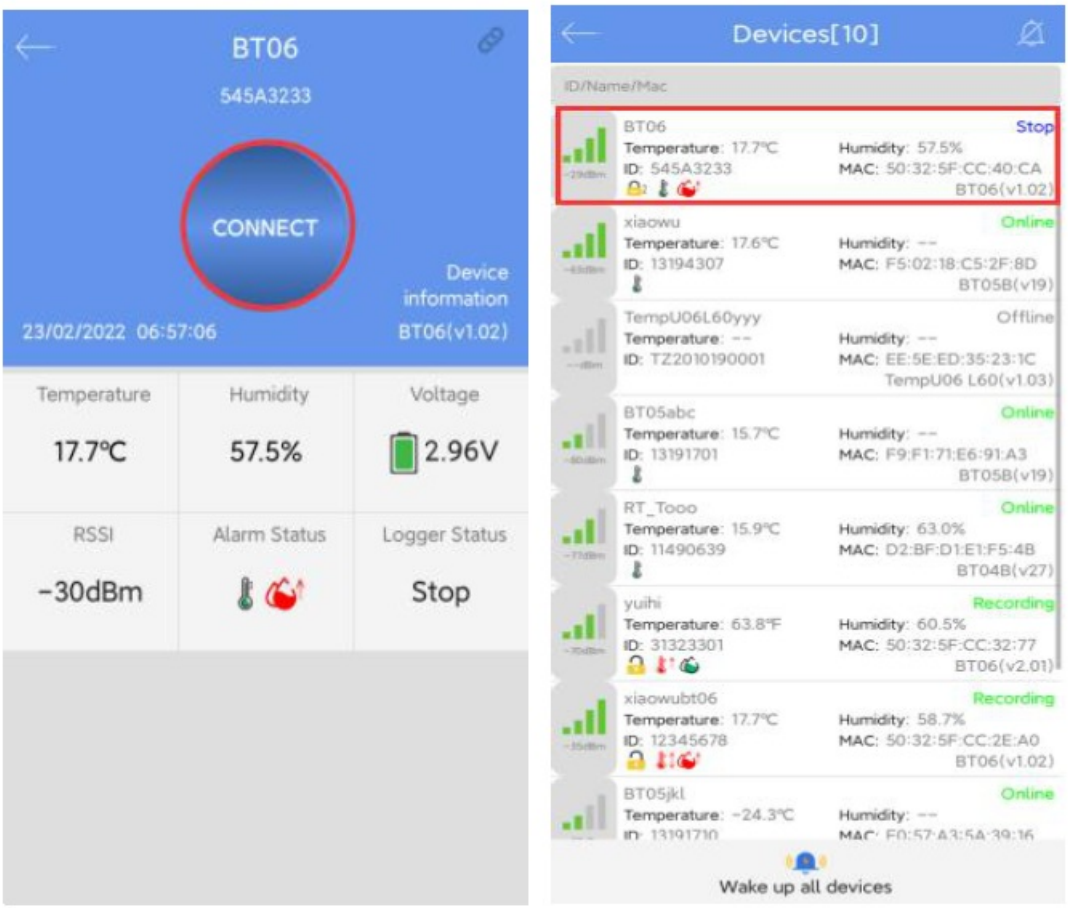


9.1 Device Registration

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 .

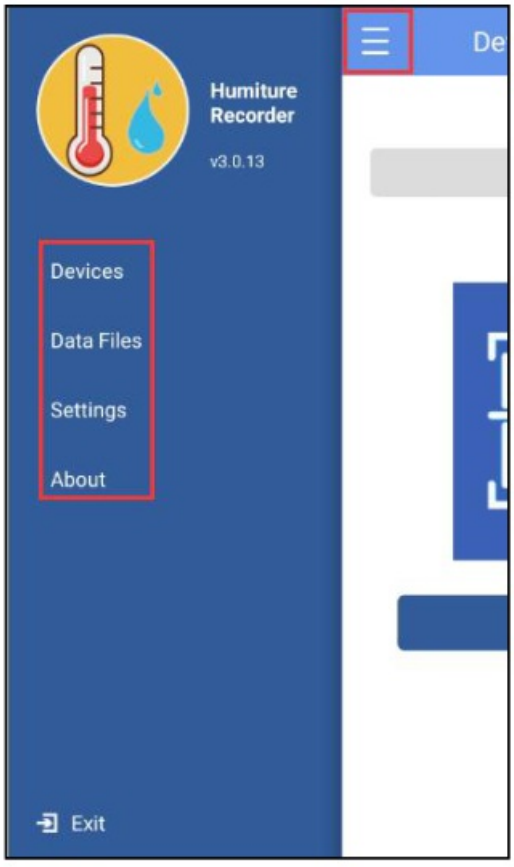


9.2.2 Enter the device connection page and click Connect. After a successful connection, the device ID will be displayed on the “Devices” page, indicating that the device has been registered successfully .



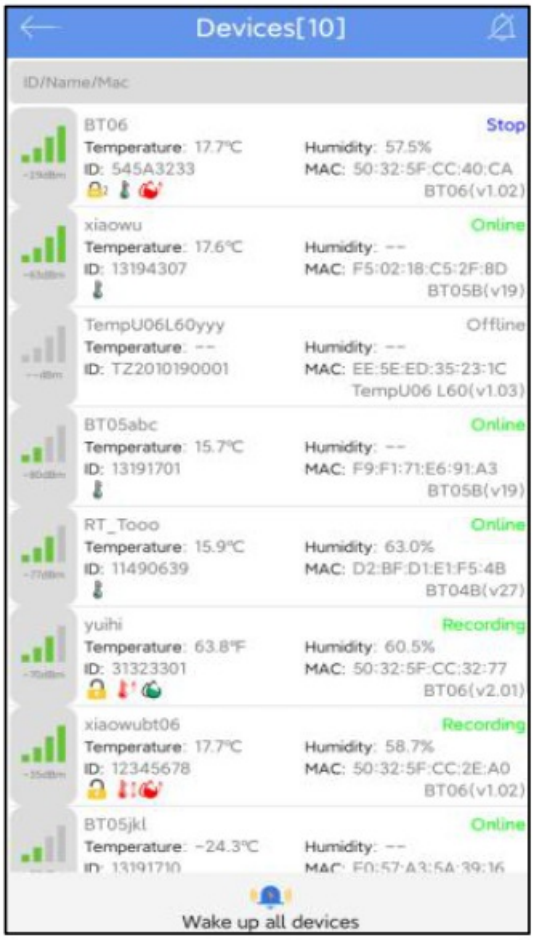
9.2 Device View

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 are as follow:



9.2.1 To view device information

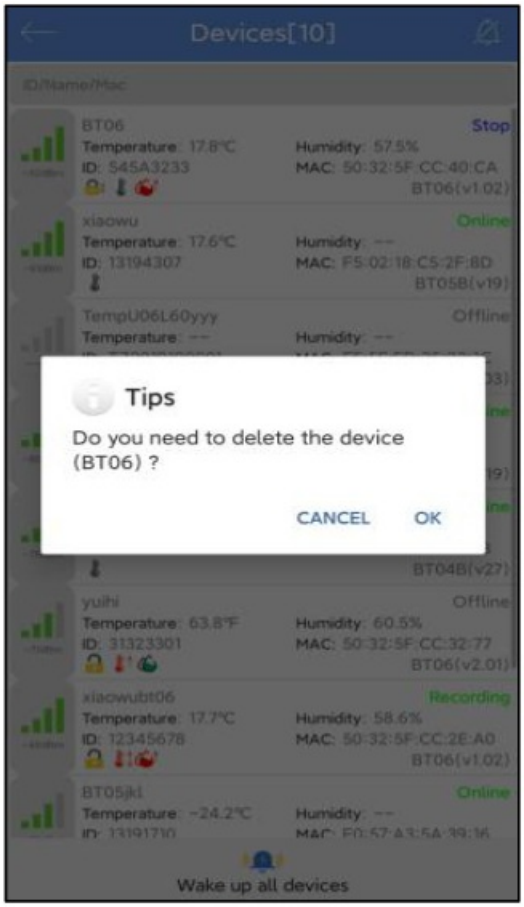
The name, ID, MAC, temperature/humidity data, model, and status of all the current devices can be viewed, or you can view the specific device information by ID, name,
and MAC.



Status description of the device in different symbols:

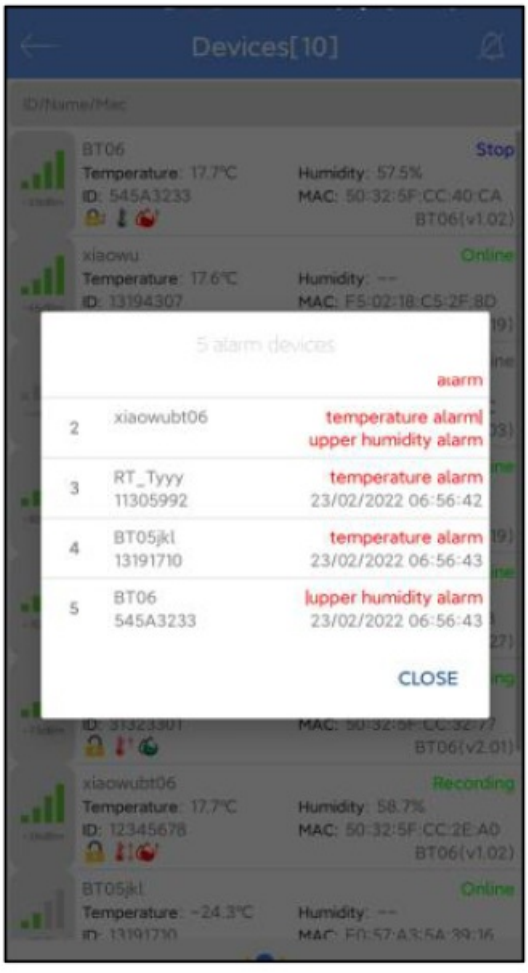
Temperature icon display	**Status**	**Humidity icon di splay**	**Status**
	Temperature normal		Humidity normal
	Upper temperature alarm		Upper humidity alarm
	Lower temperature alarm		Lower humidity alarm
	Upper and lower temperature alarm		Upper and lower humidity alarm

9.2.2 Delete the device:
Long press to delete the device:



9.2.3 Device alarm:

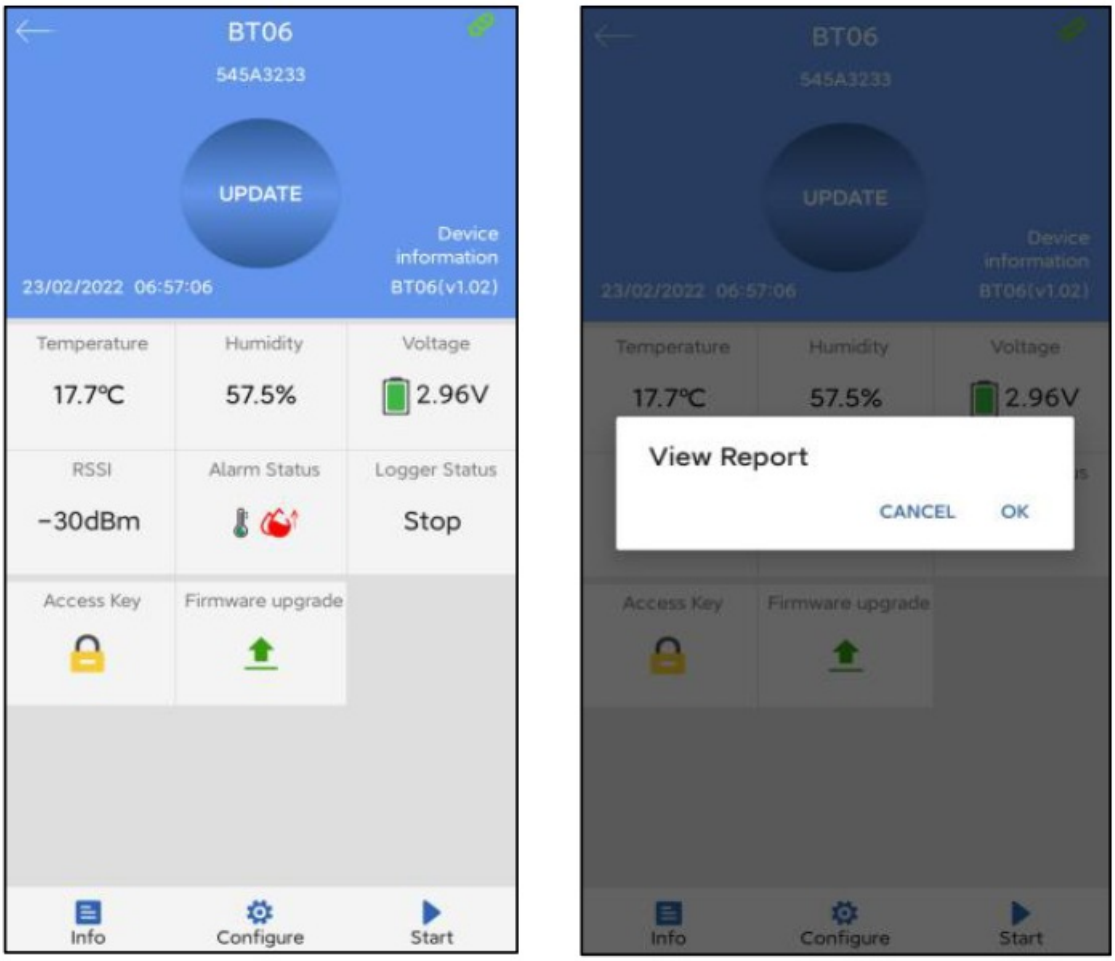
When the device exceeds the preset upper or lower limit, the alarm information will be displayed, and the alarm bell will ring. Clicking “CLOSE ” to turn off the alarm information and alarm bell.



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 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

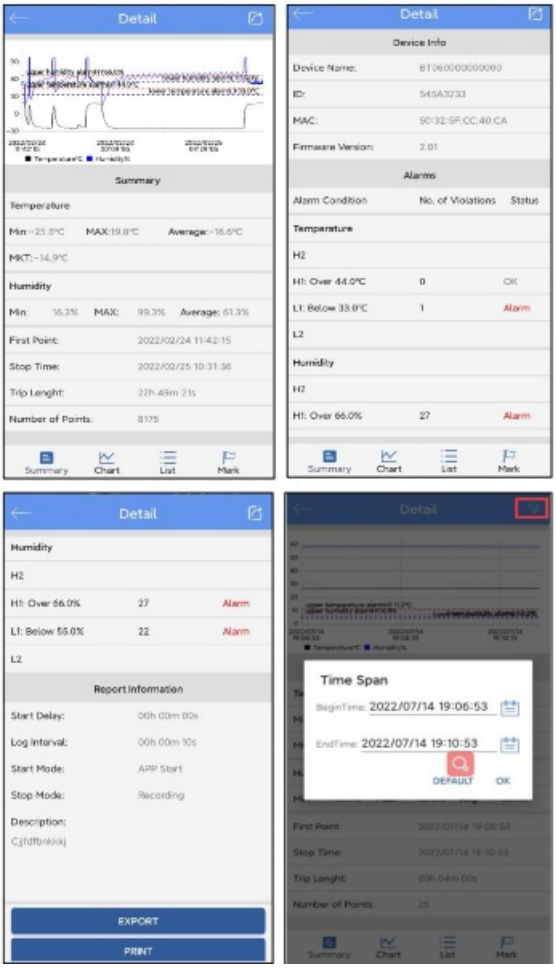
The firmware upgrade function is disabled by default. If this function is enabled in system Settings, click Firmware Upgrade to upgrade the current version to the latest
version. If the current version is the latest version, it cannot be upgraded.

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

9.3.2 Detail and email/print/selection period report function

Click “Detail” to view all information reports of 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 Bluetooth printer. Click the name to automatically pair and print the data report.Click the upper right corner to
select the time period to generate the report.

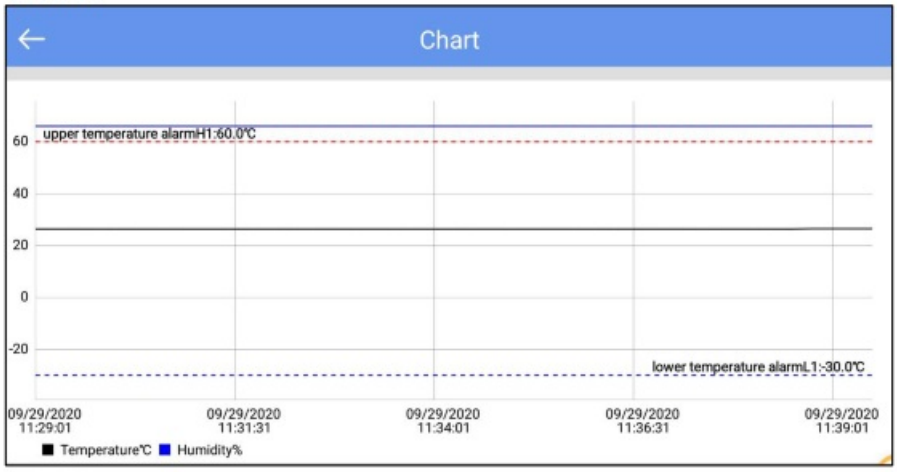
A:Details summary



Note:

1. The smartphone must have a mailbox APP and login account to send email.
2. The Bluetooth printer designated by our company must be connected.the Bluetooth name is “MTP-II” and the password is “0000”.
3. Only the Android APP has print and select time to generate the report function.

B: Chart:



C: List:

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

9.4 Configure device

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

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 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 ℃)
H1: High temperature limit:8℃
L1: Low temperature limit:2℃
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, historical data will be deleted.

9.5 Start/Stop recording

Can be started and stopped record by the start/stop button.
Note: Click save, historical data will be deleted.

9.6 Data files

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

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 read until the machine stops
recording.

9.6.2 Chart report comparison supporting up to 5 files

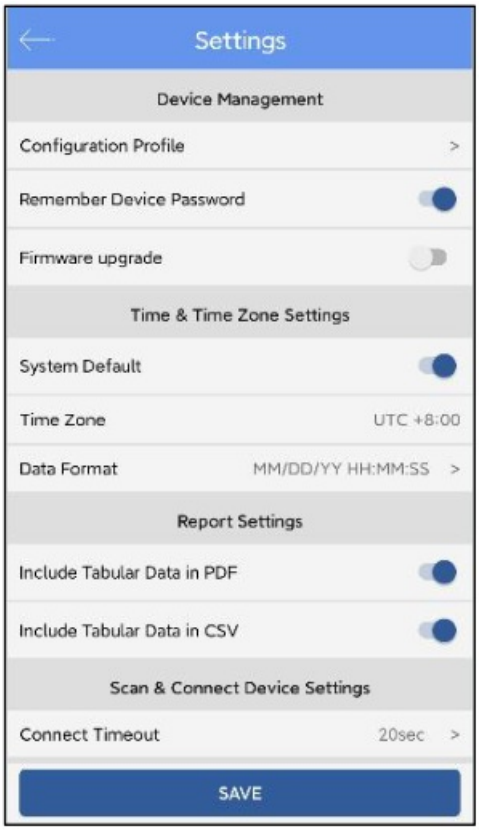
Check the data file and click “Comparison” to compare the temperature chart reports of different data files.

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 are as 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 connection 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 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 as connection timeout(default: 20 seconds).

Documents / Resources

	TZONE TZ-BT06 Bluetooth Temp and RH Data Logger [pdf] User Manual TZ-BT06 Bluetooth Temp and RH Data Logger, TZ-BT06, Bluetooth Temp and RH Data Logger, RH Data Logger, Data Logger, Logger

References