

# BLE Temp Data Logger



## **BTT01 User Manual**

**BLE/BEACON DATA PLATFORM**

# CATALOGUE

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## Functions

- BTT01 is a high precision temperature data logger. Collect ambient temperature, use Bluetooth BLE5.0 broadcast, and realize 24-hour monitoring through mobile phone APP or other Bluetooth gateways. Low power consumption, Standby up to 5 years.
- Temp data is uploaded to the cloud server through the Gateway, it also help to realize the accurate location in local area.
- When BTT01 is used alone, it needs to match APP to obtain the historical data and upload to the cloud server. The location can be located by RSSI signal strength.
- Application: Logistics management,

supply chain, warehouse, terminal and personal asset management and other fields

- BTT01 store 180days data with storing intervals per 5 minutes, Data content includes date time and temperature.
- Sync the time on APP for precise timing from the beginning.

## **BLE Broadcast Content**

- (1) beacon MAC address;
- (2) Bluetooth beacon signal strength RSSI value (signal strength when the scanner finds a beacon).
- (3) BLE Version, Battery voltage, Current Temp, Power up times, BLE UUID, Alerts status.
- (4) Device with name B1 by default;

## **Technical Parameters**

Communication method: BLE 5.0

Broadcast power: 8db

Broadcast frequency 5s (customize)

Transmission distance:

open distance up to 500 meters

## **Factors affecting Battery Life**

1. Working Temperature;
2. BLE Connection Frequency;
3. Times of Data transfer;
4. LED indicator on frequency;
5. Transmit Power;
6. Broadcast intervals, battery capacity
7. Note: In order to save power, please disconnect BLE asap after obtaining data or modifying parameters.

## **Turn on / off**

- **How to turn on:**

Device is turned off before it is shipped. Press the "start" button for four seconds to turn it on. The blue light blinks five times, from fast to slowly, extinguish finally after one minute.

- **How to shut down:**

When the device is on, press the "stop" button for four seconds, the red light flashes 3 times quickly, indicating that the device is off.

- **other:**

- When the device is turned on, press the "start" button and the blue light will light up, indicating that the device is working normally.
- When BTT01 is turned on, the

connection is established with the APP, Blue light will light up once, indicating that the connection is successful; when the device is disconnected from the APP, the red light will light up once.

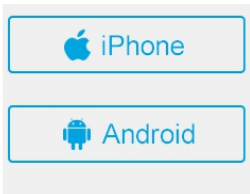
- When the device is in an alarm state (temperature over run, low battery level, etc.), the red light flashes quickly.

Note: When the battery voltage is lower than 2.5V, Blue LED is not on, please replace the device in time.

## **BLE APP Application**

- **APP download**

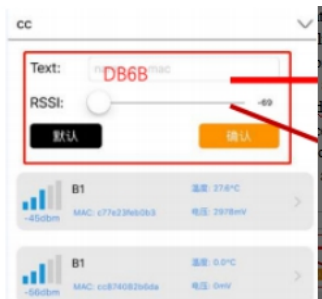
Open BLE on the cellphone, run Beacon Cloud APP (Download APP from the website or APP Store)



- The broadcast information which includes temperature, voltage, MAC address, signal strength of BTT01 device can be previewed and searched through the Beacon Cloud APP.

- Search the target device by signal strength or device name on APP.

Text: Input part of MAC address to select the device.

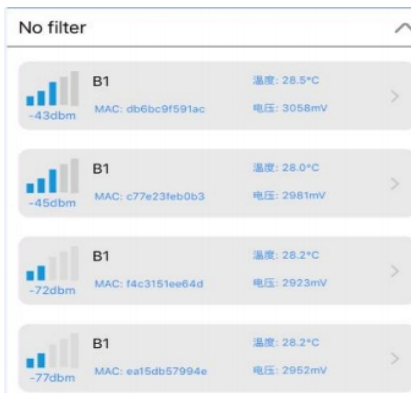


2. RSSI: Signal strength of device. The device is closer to the mobile phone, absolute value is smaller. According to this feature, devices in different ranges is screened.

Each device address is unique.

- **Device List**

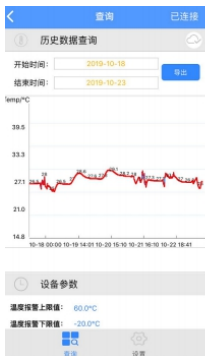
Broadcasting info of each device,



1. Device name: B1
2. MAC: Device address, unique.
3. Signal strength (RSSI) : The closer between device and mobile phone, the signal strength is to full.
4. Temp: The battery voltage for current broadcast time. When battery voltage is lower than 2.5V, the voltage font will turn red.

## • BLE Connection

Inquire device data details.



## Historical data query


Inquire the cached temperature data. After synchronizing data, select the time period to export the cached data, synchronize the data to cloud server. Hong long it takes to get the data depends on the data amount and the distance between the device and the mobile phone.


## Device Parameter


Temperature alarm upper and lower limits, collection intervals, storage interval, broadcasting interval, device

### 温度上下限

温度报警范围-20°C~60°C

广播间隔 (3000ms)    
100  5000

采集间隔 (60s)    
30  3600

存储间隔 (60s)    
30  3600

current time.

### **Device information**

Historical data curve: View the detailed data of a point by zooming with two fingers, sliding left and right/up and down.

The data synchronized to the cloud can be viewed on the platform:

<http://beacon.sky200.net>

### **Parameters configuration**

Click the Setting icon to modify.

#### **Temp upper and lower limits**

Set the upper and lower limits of the temperature alarm. When the temperature is too high, the red light of the device flashes quickly

#### **Sync the time**

Sync your phone's time to device time. It is recommended to synchronize the time first after getting device.

## Basic parameter setting

Set the collection interval, storage interval, broadcasting interval. It save 180 days data with storage interval per 5mins.

### Clear data :

Clear all cached data, restart counting.

- **OTA Upgrade:**

Synchronize to the latest software version through OTA (Over the air) upgrade when software is updated,



- **OTA Upgrade—IOS System**

- Choose the upgrade package, Open through APP.
- Connect the device that needs to be upgraded in the APP,go to Setting-Over the air Upgrade.
- Choose “Select File”.
- user File, Choose the loaded target upgrade package.
- Click Upload to start the upgrade.  
The upgrade is successful when the process bar is 100%.
- Restart the device.

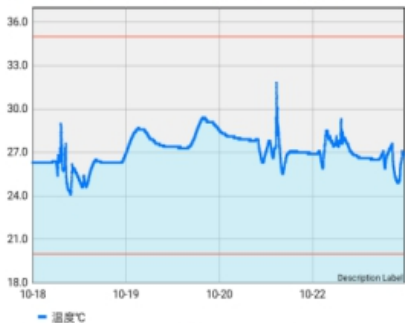
- **Export Historical data**

- Exported data is sent or stored in csv/PFD format. The filename is named with the time of export.
- Exported data is save in Android system: File management /BleExcel

/Device address/ Time of export

- Exported data format: date time + temperature

MAC	FT:34:A0:80:74:C6	设备型号	BT101
记录间隔	60秒	数据总数	7970
最高温度	31.8℃ 2019-10-21 15:20:11	最低温度	24.1℃ 2019-10-18 13:23:46
温度报警上限	35℃	温度报警下限	20℃
起始时间	2019-10-18 00:00:08	结束时间	2019-10-23 14:59:40



编号	时间	温度℃
1	2019-10-18 00:00:08	26.3
2	2019-10-18 00:01:08	26.3
3	2019-10-18 00:02:08	26.3
4	2019-10-18 00:03:08	26.3
5	2019-10-18 00:04:08	26.3
6	2019-10-18 00:05:08	26.3
7	2019-10-18 00:06:08	26.3
8	2019-10-18 00:07:08	26.3
9	2019-10-18 00:08:08	26.3
10	2019-10-18 00:09:08	26.3
11	2019-10-18 00:10:08	26.3
12	2019-10-18 00:11:08	26.3
13	2019-10-18 00:12:08	26.3

- **Temperature Unit**



Celsius/Fahrenheit:

After changing the temperature unit, it need to re-scan, connect the device, and export the data.

## **Warranty rules**

### **1 Special statement**

- 1) Technology change without notice.
- 2) If the color and appearance are inconsistent with those for the actual product, the latter will prevail.
- 3) Warranty card is only valid for devices with the following IMEI.
- 4) Please take care of the warranty card and show it with the original purchase receipts when enjoying the warranty service.

### **2 Warranty period**

Since the date of purchase, passive waste host has one year warranty.

### **3 After sales**

Any of the following circumstances not covered by the warranty, but may be appropriate to pay repair:

- 1) More than the warranty period.

- 2) Unauthorized removal or repair damaged.
- 3) Damage caused by improper installation, use, maintenance, custody.
- 4) IMEI label is torn or Obscure.
- 5) Warranty certificate and product models do not match or warranty certificate be altered.
- 6) Damage caused by force majeure

