## BTT01 USER MANUAL





### Introduction

- BTT01 is a Beacon with high accurate temperature sensor and BLE5.0. Collect temperature data, broadcast through BLE, we can realize 24 hours real time monitoring by mobile phone APP or other BLE product. No need to change battery within 5 years.
- Can be used together with STF2, one STF2 can match with 24 beacons .Upload data to the server through STF2. Accurate position to some extent.
- When using BTT01 seperately, mobile APP is needed, You can get historical information of the device from APP, and judge the position by RSSI signal.
- It can be used to manage your logistics, supply chain, warehouses, yards, and enterprise assets.
- BTT01 can save 180 days' data package (save one data package every 5 minutes), Data package includes Time+temperature consumption



#### **Broadcasting information via Bluetooth:**

- (1) MAC address of bluetooth beacon
- (2) Signal strength RSSI of bluetooth beacon (Signal strength when scanning the beacon)
- (3) Bluetooth version, battery voltage, temperature, boot times, bluetooth UUID
- (4) Default device name "B1"

#### Factors on battery life of bluetooth beacon

- 1. The below factors will effect the battery life:working temperature; connectivity frequency of Bluetooth; data transmission times; frequency of LED light; transmitting power; broadcast time interval and battery capacity.
- 2. After completed the data receiving or parameter modification, the Bluetooth master should to disconnect from the Beacon device immediately.



#### **Parameters:**

Communication mode: BLE5.0

Broadcast power:8db

Broadcast frequency:5s (Can customize)

Transmission distance: Max 500m in open place

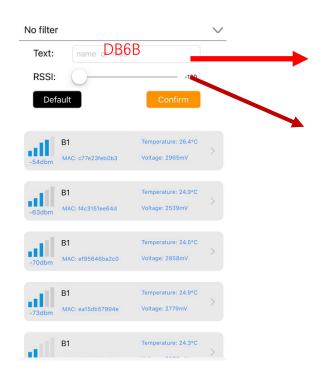


#### Power on/off and LED light

- How to power on:
  - The device is OFF when shipment, press "Start" for 3 seconds, device is powered on, BTT01 changes to the status of searchable and connectable, blue LED flashes 5 times, from fast to slow, stop flashing after one minute.
- How to power off:
  When device is ON, press "Stop" for 3 seconds, red LED fast flashes 3 times, device is powered off.
- Others:
- 1. When device is ON, press "Start", blue LED flashes once which means the device is working
- 2. Device is ON, when connecting with APP, blue LED light flashes once which means connected successfully; When device disconnecs with APP, red LED light flashes once.
  - 3. Device on the status of abnormal, red LED light fast flashes.
- When voltage below 2.5v, device can not work normally.

# Open BLE of your mobile phone, Run Keelin\_Beacon APP (Download through official website or APPStore)

- You can scan the broadcast information of BTT01 through Keelin\_Beacon, including temperature, voltage, Mac address, signal strength
- In Keelin\_Beacon app, You can search the device by signal strength, device name, mac address, check <a href="Image">Image</a> 1



BLE APP:

- DB6BC9F591AC), Click OK, it will select the device with this MAC address automatically.
- 2. RSSI: signal strengh of the device. The closer the device with the phone, the smaller for the number. You can select the right device according to this characteristics. -100db no selection.
- 3. There is only one MAC address for each device.

Image 1



• Device list, broadcasting information for each item, see <a href="Image 2">Image 2</a>

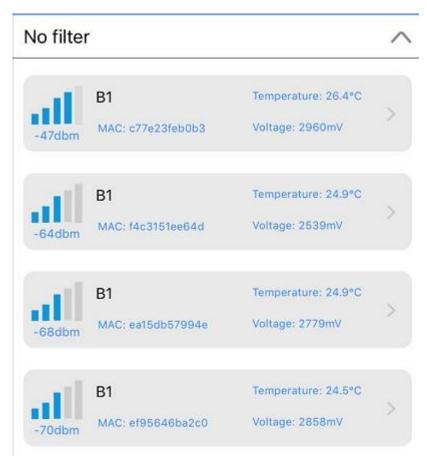
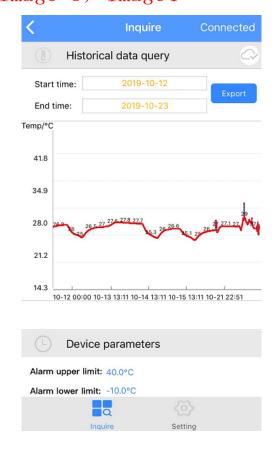


Image 2

- 1. Device name: B1
- 2. MAC: device address, only one address number
- 3. signal strength (RSSI), the closer device with mobile phone app, the stronger signal is
- 4. Temperature: the temperature of broadcasting time
- 5. Voltage:Battery voltage of broadcasting time



• Choose the device and set up bluetooth connecting, and check the data for the device See Image 3, Image4



**S**BLE When the temperature is above the upper limit or below the device indicator will flash red 2019-07-25 10:58 Broadcast interval (3000ms) Collection interval (60S) Storage interval (300S) **Device Information** e2e2 ED: 05: 3E: BD: 49: BE BTT01 V1.2.1 Jul 24 2019 15:46:30 Device version EElink Factory Q

Image 3

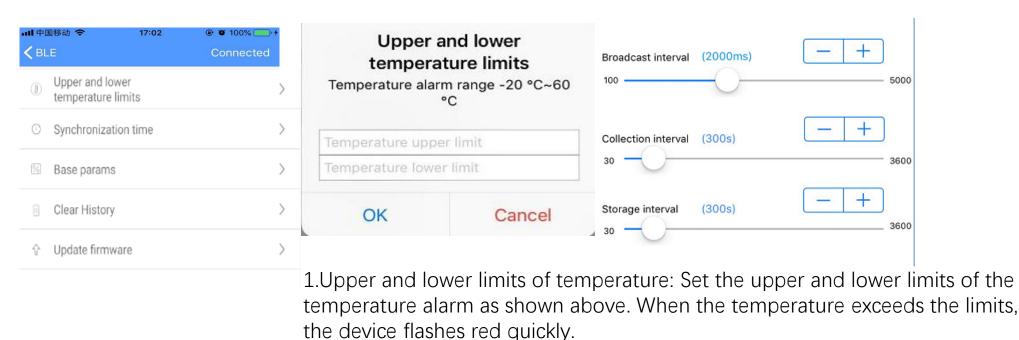
Image 4

- 1. Historical data query: You can query the cached temperature data. Once the files are synced. you can export the required cached data by Time. Sync data to the cloud.
  - How long to receive all the data depend by the amount of data saved in the device, as well as the distance between the device and cellphone.
- 2. Device parameters: current parameter values set by the device, upper and lower limits of the temperature alarm, collection interval, and time of the device.
- 3. Device information TIPS:

Data synchronized to the cloud can be viewed at http://beacon.sky200.net/ platform



• On interface Image3 and Image4, Click setting to enter <a href="Image5">Image5</a>, here to modify paratmers of the device.



- 2. Sync time: Synchronize the time of the phone with the time of the device.
- 3. Base params: As shown in the above picture, set collection interval of the device. It can store Max to 50000. If stored one data every 5 minutes, it can save 180 days of cached data.
- 4.Clear data: Clear all cached data. Restart counting.
- 5. Update firmware: When software is updated, you can synchronize to the latest software version through air upgrade.

Image 5

<a>∅</a>

Setting



Update firmware—IOS。



**Step1**: Select the wireless upgrade package and open it in keelin-Beacon mode.

**Step2:** Connect the device that need to be upgraded through keelin\_Beacon APP, set up - OTA upgrade.

Step3: as shown in Image 6, select Select File.

Step4: user File, select the target upgrade package loaded. Click Upload in Image 6 to start the upgrade. When the progress bar is 100%, the upgrade is successful. The device reboots.

Image 6



• Export historical data, export data will be sent or stored in format of csv or pdf. The file is named with exporting time.

Android system data storage: file management / BleExcel / (device address) /

export time. csv / time.pdf

• Export data table, see <a href="Image7">Image7</a>
Data format: date time + temperature

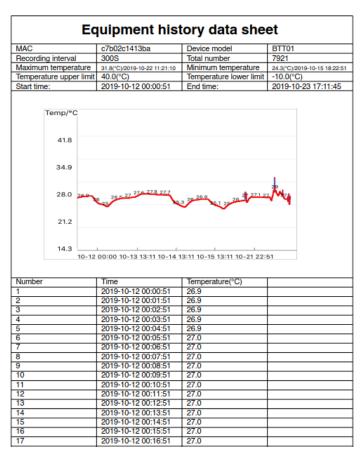


Image 7



• Temperature unit

