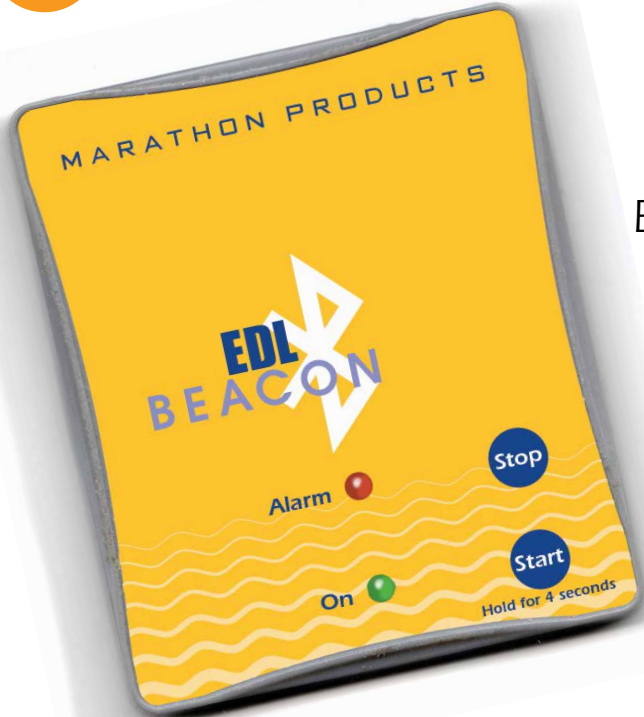


MARATHON PRODUCTS, INC.



EDL-Beacon

Introduction

- Our EDL-Beacon is a highly accurate temperature sensor and BLE5.0 device. 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.
- During use, you can get historical information of the device from the APP, and judge the position by RSSI signal.
- It can be used to manage your logistics, supply chain, warehouses, yards, and enterprise assets.
- The EDL-Beacon can save up to 180 days of data (save one Time/Temperature data package every 5 minutes).

Broadcasting Information via Bluetooth:

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

Factors on battery life of bluetooth beacon

1. The following 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 completing the data download or parameter modifications, disconnect the Bluetooth master from the Beacon device immediately.

Parameters:

- Communication mode: BLE5.0
- Broadcast power: 8db
- Broadcast frequency: 5s (customizable)
- Transmission distance: Maximum 500m in open place

Operating Instructions:

- **How to power on:** The device is OFF when shipped. Press "Start" for 3 seconds. Device is powered on. The device changes to "searchable and connectable," the blue LED flashes 5 times, from fast to slow, and stops flashing after one minute.
- **How to power off:** When the device is ON, press "Stop" for 3 seconds. The red LED will fast flash 3 times. The device will power off.
- Pressing the "Start" button when the device is ON: the blue LED flashes once which means the device is working
- When connecting with the APP (while the device is ON), the blue LED light will flash once, which means it connected successfully. When the device disconnects with the APP, the red LED light will flash once.
- An abnormal status will result in the red LED light "fast flashing."
- Warning: When voltage is below 2.5v, the device can not work normally.

Install the BLE APP

Open BLE on your mobile phone. Run EDL_Beacon APP. Download through official website or APPStore.

Using the APP

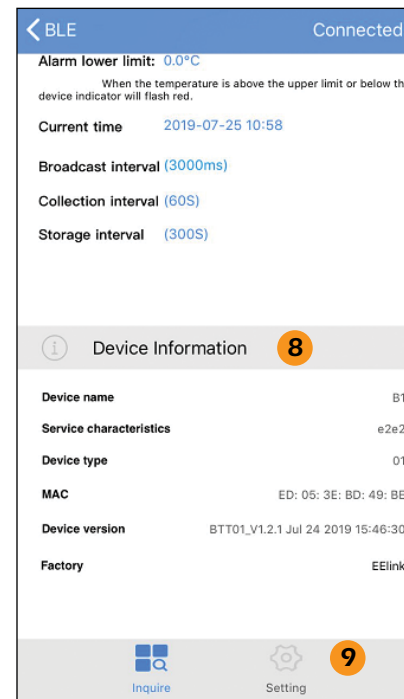
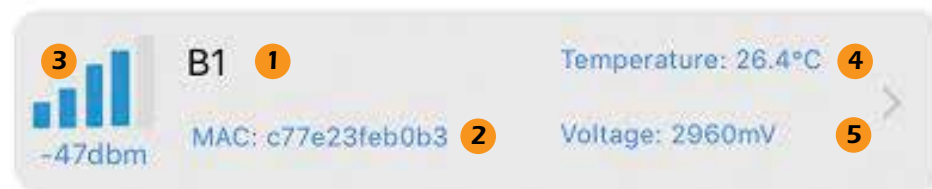
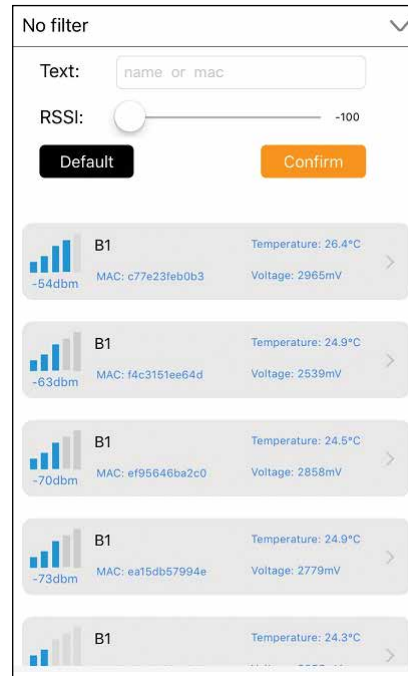
- You can scan the broadcast information of the device through EDL_Beacon App, including temperature, voltage, Mac address, and signal strength.
- In the APP, you can search for the device by signal strength, device name, or mac address.

Search by:

- MAC Address:** Enter part of the MAC address of the device (ie DB6B of DB6BC9F591AC). Click OK it will select the device with this MAC address automatically.
- RSSI Signal Strength of the device.** The closer the device with the phone, the smaller the number. You can select the correct device using this characteristic. (100db = no selection.)
- There is only one MAC address for each device.

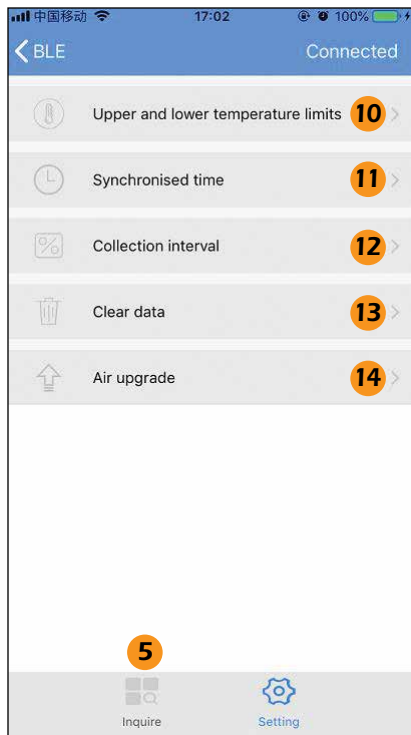
Device list: broadcasting information for each item.

- Device name: The default name is B1
- MAC device address: only one address number per device.
- Signal Strength RSSI: the closer the device is to the mobile phone app, the stronger the signal.
- Temperature: the temperature at broadcasting time
- Voltage: Battery: voltage at broadcasting time



Choose the device to set up bluetooth connections, and check the data for the device

- Historical data query:** You can query the cached temperature data. Once the files are synced, you can export the required cached data by time. How long it takes to receive all the data depends on the amount of data saved in the device, as well as the distance between the device and cellphone.
- Device parameters:** displays current parameter values set on the device: alarm upper and lower limits, broadcast interval, collection interval, and storage interval.
- Device information:** displays Device name, Service Characteristics, Device type, MAC address, Device version, Factory.
- Click **"Setting"** to modify parameters of the device.

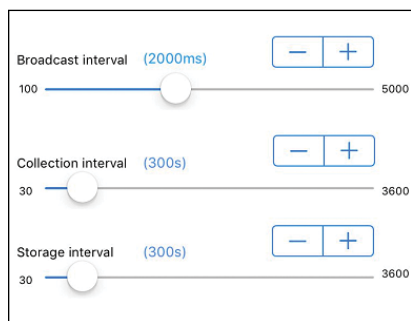


Changing Parameters

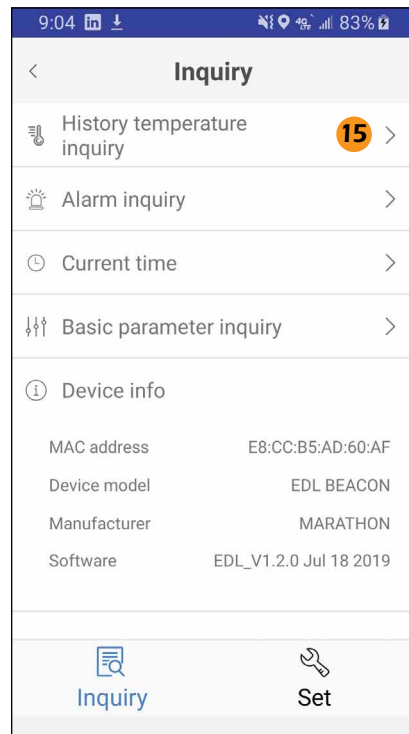
- 10 Upper & lower temperature limits:** Click link; a new window will open. See **A**. Set the upper and lower limits of the temperature alarm. When the temperature exceeds the limits, the device flashes red quickly.
- 11 Synchronised time:** Synchronize the phone time with the time of the device.
- 12 Collection interval:** Click link; a new window will open. See **B**. Set collection interval of the device. It can store up to 50,000 data points. If set for one data every 5 minutes, it can save 180 days of cached data.
- 13 Clear data:** Clear all cached data. The device will restart counting.
- 14 Air upgrade** When software is updated, you can synchronize to the latest software version. Click link; a new window will open. See **D**.



Window **A**



Window **B**



Reports

- 15 Inquiry :** Click on History Temperature Inquiry:

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

Options

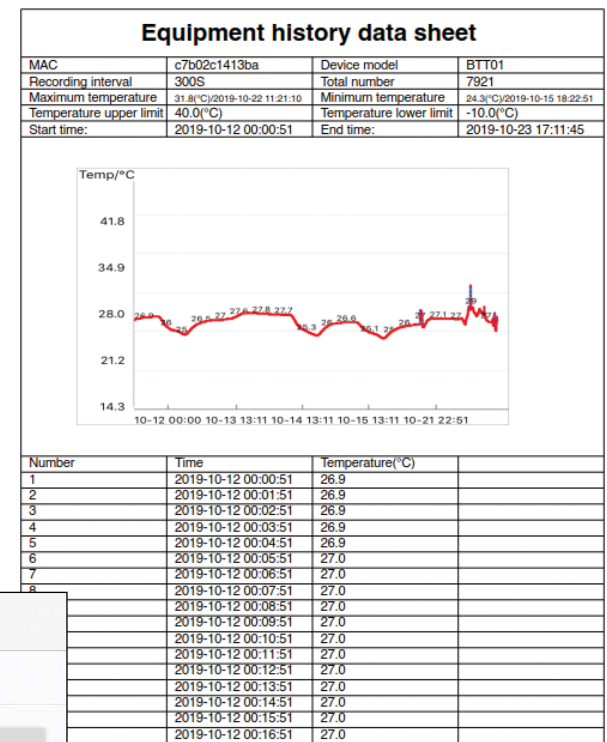
- **Temperature devices.** Click link; a new window will open. See **C**. Choose Celcius or Farenheit. Save changes.



Window **C**

Update firmware

- Step 1:** Select the wireless upgrade package and open it in EDL_Beacon mode.
- Step 2:** Connect the device that needs to be upgraded through EDL_Beacon APP, set up OTA upgrade.
- Step 3:** as shown in Window D , choose "Select File."
- Step 4:** User File. Select the target upgrade package loaded. Click "Upload" to start the upgrade. When the progress bar is 100%, the upgrade is successful. The device reboots.



Window **D**

