

# KTBB801

## BLE beacon

### Data sheet



## Document information

<b>Title</b>	KTBB801	
<b>Subtitle</b>	BLE Beacon	
<b>Document type</b>	Data sheet	
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## 1 Product Overview

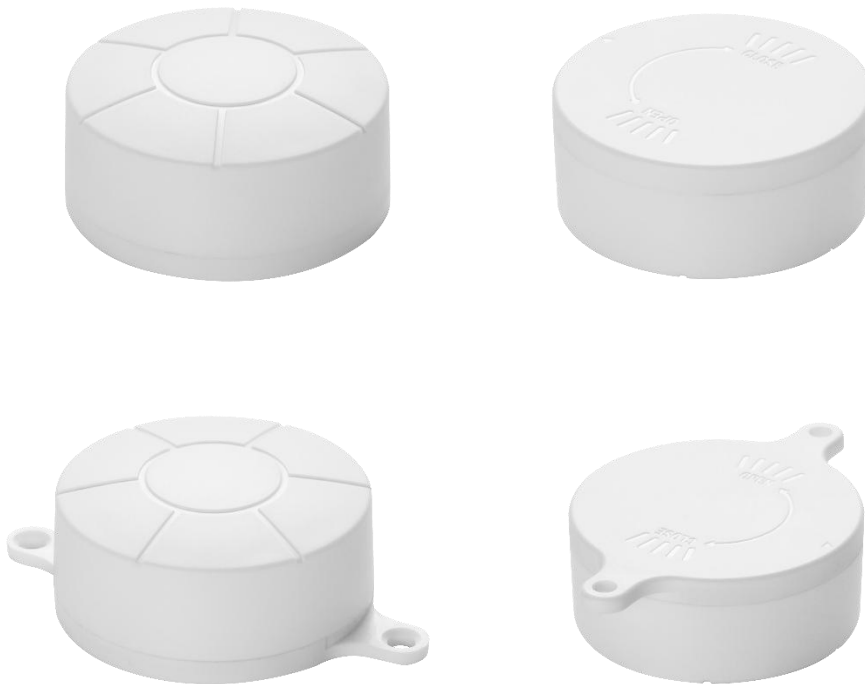
KTBB801 is a Bluetooth beacon based on low power Bluetooth chip launched by Shenzhen Kunlun Link Technology Co., Ltd., which is powered by two ER14250 batteries and can be used for up to 5 years.

KTBB801 can broadcast UUID, Major, Minor, RSSI, battery power, Bluetooth name, Bluetooth MAC address and other information, where UUID, Major, Minor, Bluetooth name can be set through the mobile phone APP.

KTBB801 broadcast distance can reach 80 meters, using 3M glue can be easily installed and fixed.

KTBB801 firmware is divided into connectable type and non-connect type. Connectivity type can change Bluetooth beacon parameters at any time through mobile phone connection. Non-connect type can only connect and change parameters within 30 seconds of Bluetooth beacon power on.

KTBB801 default model without temperature and humidity sensor and acceleration sensor, if necessary, please contact our sales.



Product Photos

## 2 Hardware parameters

Hardware parameters	
Model	KTBB801
Antenna	PCB antenna
Battery	ER14250 of lithium batteries      2*1200 mAh

Voltage	3.6 V
Dimensions (D×H)	53.86*24.93 mm
<b>Wireless performance</b>	
Wireless standards	Bluetooth ®4.2
Frequency range	2400MHz--2483.5MHz
Data rate	1Mbps
Modulation mode	GFSK Modulation
Encryption	AES HW Encryption
Transmission power	Tx Power -20to +4 dBm in 4dB Steps
Receiving sensitivity	93 dBm at 1Mbps BLE
Work model	Peripheral
<b>Other</b>	
Environment	Working temperature :-40°C~85°C
	Storage temperature :-40°C~85°C
	Working humidity :10~90 Non-condensing per cent
	Storage humidity :5~90 Non-condensing

<b>Temperature and humidity indicators (for Bluetooth beacons with temperature and humidity sensors)</b>	
Measurement accuracy of humidity	±1.5% RH
Humidity measurement resolution	0.01% RH
Temperature measurement accuracy	±0.1°C (in the range of 20-60°C)
Temperature measurement resolution	0.015°C
Temperature measurement range	-40~125 °C

### 3 Battery life

Transmission power (dBm)	Broadcast distance (m)	Broadcast intervals (ms)	Average current (μA)	Battery life (year)
4	70	100	260	1.05
		500	50	5.48

		1000	30	9.13
0	50	100	200	1.37
		500	30	9.13
		1000	25	10.96

Note:

The above data does not consider the battery self-discharge, the time is for reference only. Considering the self-discharge of the battery, the actual use time can be calculated by multiplying the table time by 0.6.

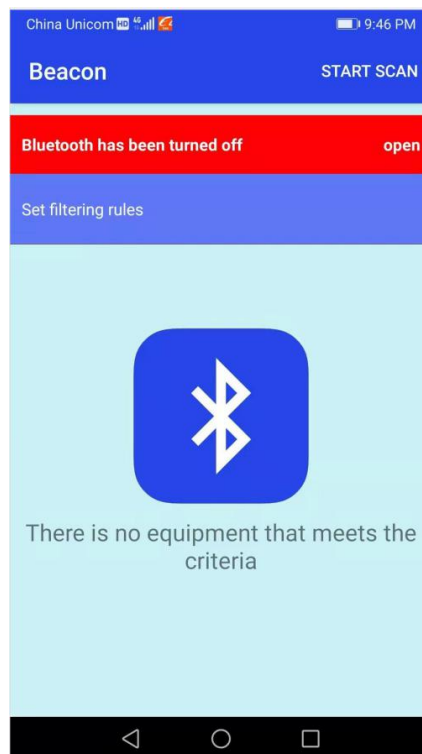
The above data is the theoretical data of standard products without temperature and humidity sensors and acceleration sensors.

## 4 APP instructions

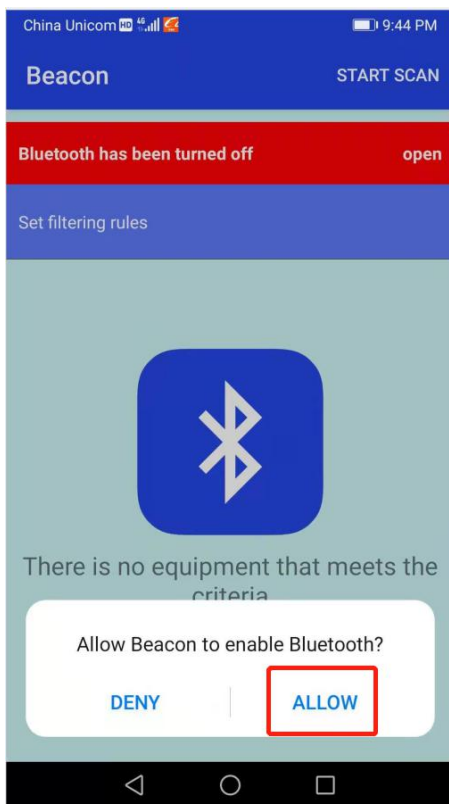
4.1 Install Bluetooth beacon settings APP from Kunlun Link, we only support Android phones currently. After installation, the following icon will be added to the phone.



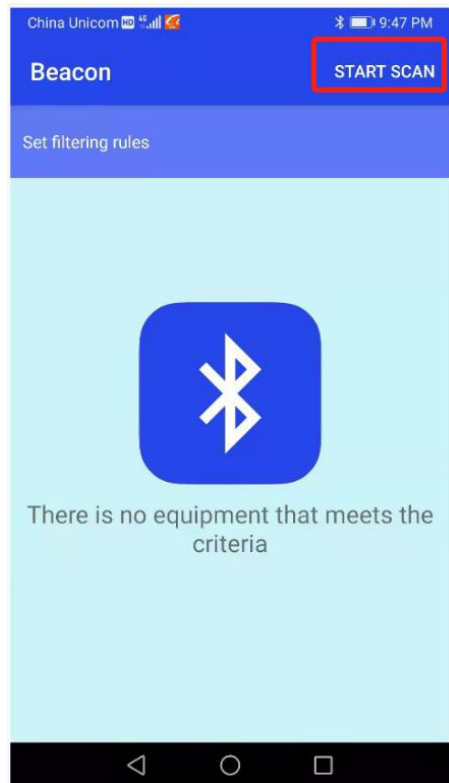
4.2 If "Bluetooth has been turned off", Please click "open".



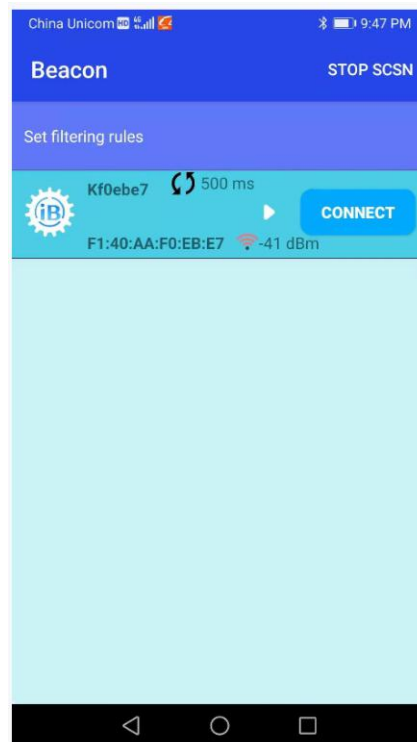
4.3 If prompted "Allow Beacon to Enable Bluetooth", click" ALLOW ".



4.4 Click the Start Scan button and the phone starts scanning the surrounding Bluetooth beacon.



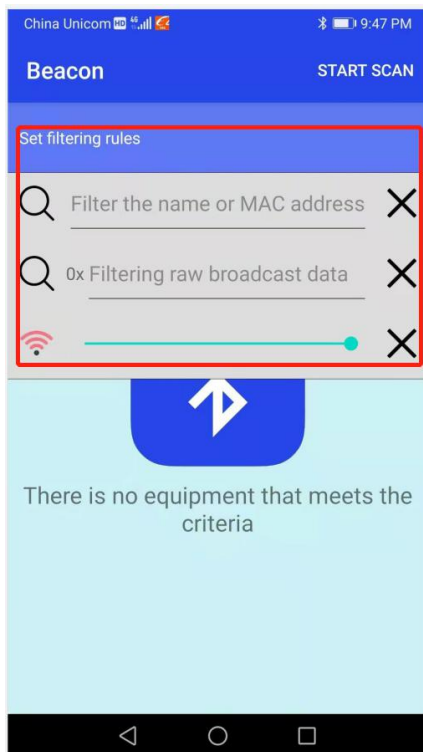
4.5 The results are as follows:



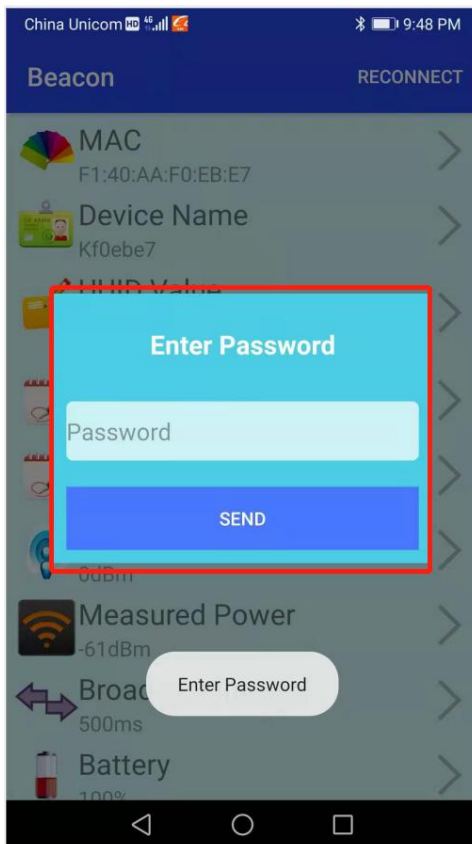
4.6 Click on one of them, you can see the details as shown below, if the Bluetooth beacon with temperature and humidity sensor, will show temperature and humidity, if the Bluetooth beacon with acceleration sensor, when the beacon is still Bluetooth name after the "pause" symbol, When the beacon moves, the Bluetooth name is followed by the "play" symbol.



4.7 The MAC address, Bluetooth name, raw broadcast data, signal strength (RSSI) can be set by clicking "Set Filter Rules."



4.8 If there is a "Connect" button, indicating that this Bluetooth beacon can be connected, click on the connection, required to enter the password, the password is :1234.





4.9 Relevant parameters can be set after connection, such as: device name, UUID、Major、Minor、Transmit power, broadcast frequency, reference power at 1 meter, temperature and humidity detection interval, etc.

Below is the example to change the Transmit power.



## 5 Order Type

KTBB801: Beacon with 3M glue

KGBB801-E : Beacon with round ears

K TBB801-T : Beacon with temperature and humidity sensor

## 6 Contact us

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## 7 Version History

Version Number	Date	Change of personnel	Change content
V1.0	31 Mar 2020	Robot2	Initial release