

# SmartBeacon-USB/USB-E User Manual

## Outlook



With the craftsman's Spirit of Sensoro and aiming at perfection to the very last detail, SmartBeacon-USB is designed to pursue the ultimate.

It is compatible with USB connector, which can adapt to 5V DC power. Integrated with multiple sensors for more powerful functionality, we also persist in the entire structural aesthetics and more efficient energy utilization. SmartBeacon-USB is not only a Beacon, but also a product with Sensoro Spirit.

## Tech Specifications

Item	Item Description
<b>Board Info</b>	
*Layer	4 Layer
*Size	39mm(L)*12mm(W)
*Thickness	2.5mm
*Surface Treatment	Matt black ENIG PCB
<b>Control &amp; Display</b>	
*Control	BLE SOC Chip
*Antenna	2.4G PCB Antenna
*LED	1 LED
*Sensor	3 Axis G-Sensor (Optional Sensor)
	Temperature Sensor
<b>Basic Info</b>	
*BT	BLE Only
*Operating Voltage	DC 4.2V ~ 5.5V, Typ 5.0V
*Dimensions	43mm (L) * 17.4mm(W) * 7.4mm(T)
*Weight	4g
*Operating Temperature	-25°C ~ 75°C

*Sleep Mode Power Consumption	40mW
*Sleep Mode Current	8mA
*Radius Power	-30dBm to 4.5dBm; applicable for signal coverage optimization (EIRP)
*Transmission Range	Up to 80m
*Broadcast Frequency	Broadcasting time interval: adjustable (100~1285ms)
* Resistances	Anti-vibration
*Name	Parameter
*Protocol standard	Bluetooth® 4.0 with iBeacon certification
*System Requirements	iOS7.0 / Android 4.3 or above
*Upgrade	Support for Firmware Over-The Air upgrade
*Security	Support Password for Connection
<b>Installation</b>	
*USB port	Power Supply Interface, insert SmartBeacon-USB into the USB port .

## Main Features

1. Easy to Use  
SmartBeacon-USB is powered by standard USB port. So it's easy to use by inserting it to any device with USB port, like PC, TV, etc.
2. Low power consumption  
Employing Bluetooth® 4.0(Bluetooth® low energy) Nordic NFR51822 chip, SmartBeacon-USB consume less power with better performance.
3. Compatibility  
Software and firmware completely fulfill Apple's iBeacon technical standards and can be applied to systems including:  
  
iOS 7.0 or above:  
iPhone 4S,iPhone 5, iPhone 5S, iPad 3, iPad mini, iPad air.  
  
Android 4.3 or above:  
Samsung Galaxy S III, Galaxy S IV, Galaxy Note II, Galaxy Note III and Motorola RAZR, HTC ONE, etc.

## Download configuration tool

Scan QR code to get the App from [www.sensoro.com](http://www.sensoro.com)



## Signal stability and data transmission

### 1. Transmission reliability and range

To achieve long-distance data transmission with more stable signals, we have conducted numbers of testing and corresponding modifications. SmartBeacon-USB works stability under complex circumstances. Radius power is adjustable to fit the need, the largest signal coverage of which can be ranged up to 80m with 2826 m<sup>2</sup> area, while the smallest can be ranged to only 0.15m with 0.225m<sup>2</sup> area which means you may not receive any signal out of the 0.225m<sup>2</sup> region.

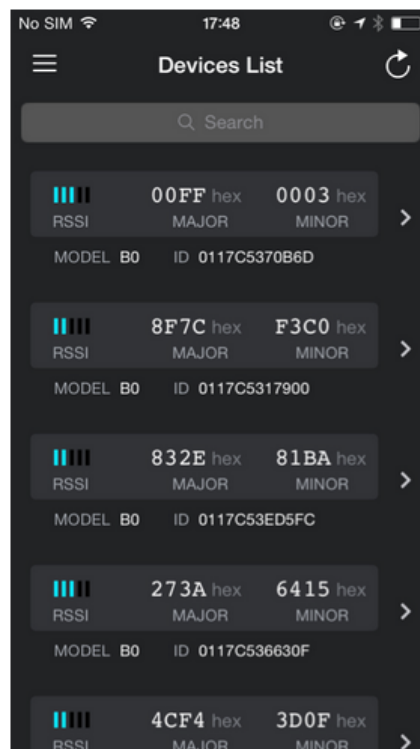
### 2. Enterprise level device management support

Manage status of mass volume devices is an essential requirement for an enterprise level deployment. By using our patent technology, you can gather status of each device that deployed in a batch way. Assets management of beacon devices is an easy task now with our solution.

## Configuration tool

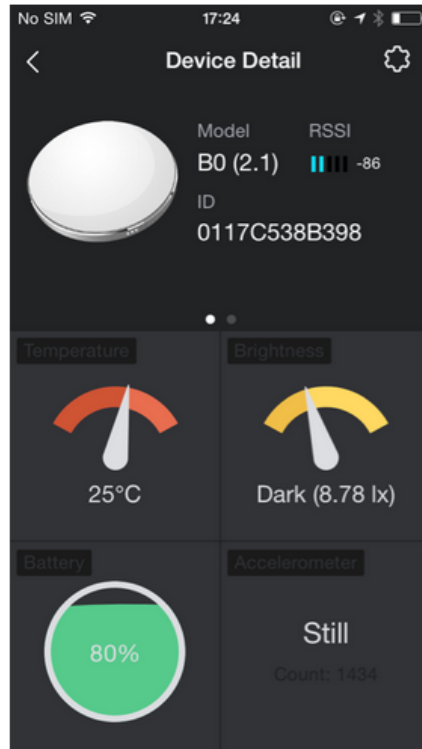
The configuration tool "Sensoro" is a mobile app designed for developers to check and modify SmartBeacon-USB' configurations. It is compatible with iOS 7.0 or above (iPhone 4S, iPhone 5, iPhone 5S, iPad 3, iPad mini, iPad air) and Android 4.3 or above (Samsung Galaxy S III, Galaxy S IV, Galaxy Note II, Galaxy Note III and Motorola RAZR, HTC ONE, etc.)

Open up the configuration tool, you will see all the Sensoro Beacons nearby. Each Sensoro Beacon's Major, Minor and animated RSSI bar will be shown on the list.

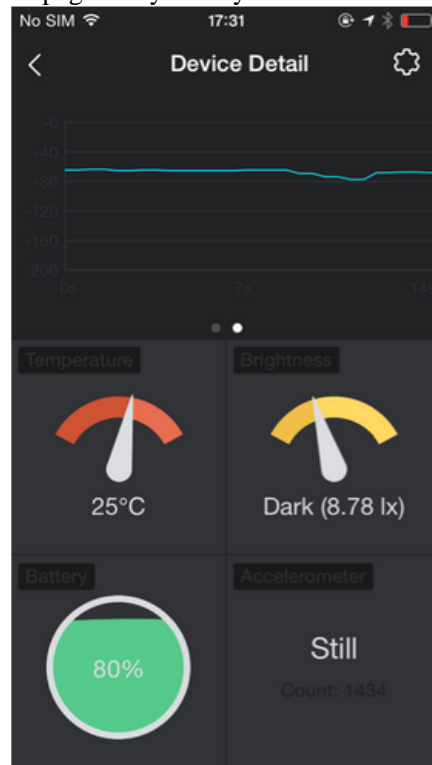


In case you are deploying numbers of Sensoro Beacon within certain area, a specific function is designed to help you select the one at hand - simply shake the Sensoro Beacon and its information bar will perform a vibrating animation.

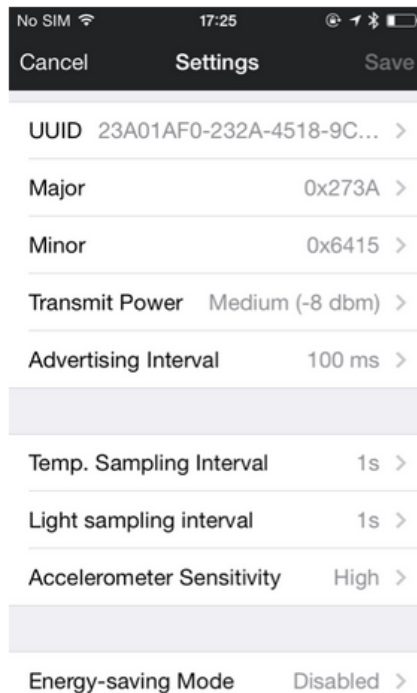
Select one Sensoro Beacon's info bar and enter the detail page. Every Sensoro Beacon is integrated with a temperature sensor, and an accelerometer. Every sensor's data and the battery status are real-time displayed, which reflect the operation status of specific Sensoro Beacon in a visualized and direct manner.



Flip the upper section of this page and you may check the RSSI signal graph accurately.



You can access to Sensoro Beacon's UUID, Major and Minor through this configuration tool and revise them according to your need. Through this app, you may also setup Sensoro Beacon's radius power, broadcasting frequency and even modify the operation parameters of the sensors.



As to security considerations, you may setup password so that only authorized user can access to Sensoro Beacon's settings.

### Quality Guarantee

Sensoro Beacon has been certificated with FCC and CE. FCC certification number:2AEG9-D0. To ensure the quality, every single device has to pass through testing and must be scrupulously checked for imperfections (Defect detection, frequency spectrum test, power consumption test, stability test, etc.).



### Note

Trademark: SENSORO  
Product Name: SmartBeacon  
Model No: USB/USB-E

### Customer Service

Tell : +86 010-8416 1077  
Email : [seattle@sensoro.com](mailto:seattle@sensoro.com)

### FCC Caution:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.