

# **BC02 BLE Beacon**

Specification

V1.0





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### 1 Introduction

This Bluetooth beacon features a high-performance, low-power Bluetooth chip and a large-capacity battery, delivering a service life of over 7 years under low-power broadcasting conditions. Its robust internal and external structural design leverages reliable engineering to enhance pressure resistance and environmental protection, making it ideal for maintenance-free, deployments in demanding conditions. The beacon's signals can be detected by Bluetooth-enabled devices such as the <a href="SenseCAP T1000 Tracker">SenseCAP T1000 Tracker</a>, enabling accurate proximity detection for indoor positioning, asset tracking, and other location-based applications.

### 1.1 Features



- Bluetooth® LE 5.0
- Long battery life: More than 7 years (In default configuration)
- Rugged and Durable: IP68 waterproof and IK08
  impact-resistant for harsh conditions





### 1.2 BLE Positioning System

GPS has proven its ability to locate outdoors. Now, we also tend to move to indoor positioning, and Bluetooth beacons make indoor precise positioning possible. Combine with <a href="SenseCAP T1000 Tracker">SenseCAP T1000 Tracker</a> to build an indoor positioning solution.

<u>SenseCAP T1000</u> is a compact LoRaWAN® tracker that utilizes GNSS/Wi-Fi/Bluetooth for precise location tracking. It's ideal for a variety of location-based applications.

Deploy Bluetooth beacons in your target area, the tracker receives the signal sent by the beacon, and the positioning accuracy is at the meter level (2-3 meters). It can realize functions such as asset tracking, route planning, reverse car search, etc., and can be integrated into applets and APPs.



## 1.3 Power On/Off Description

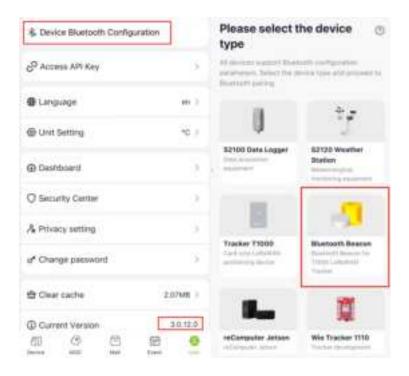
Note: This product is shipped powered on by default and **Does Not Support Shutdown**.



You can view/configure device information through the SenseCraft APP.

## 1.4 Configuration

Parameter Viewing and Configuration with SenseCraft APP(IOS>3.0.12, Android>3.0.11)





## 2 Specification

## 2.1 General Specification

Material	ABS+PC
IP rate	IP68
IK rate	IK08
Dimension(L*W*H)	115*100*29 mm
Weight	169.1g (include battery)
Battery	Lithium-ion battery, 4000mAh
Battery life	More than 7 years
	(In default configuration)
Working temperature	-40~85°C
Working Humidity	0~95%RH, no condensation
Bluetooth Version	BLE 5.0
Bluetooth Protocol	iBeacon
Broadcasting Power	-40~+4dBm
Broadcasting Frequency	100ms~5s
Broadcasting Distance	Up to 75 meters in open areas



## 2.2 Default broadcast parameters

Parameters	Default Value
UUID	FDA50693-A4E2-4FB1-AFCF-C6EB07647825
Major	10001
Minor	19641
Measured power	-59dBm
Transmission Power	0dBm
Broadcasting Interval	300ms
Password	seeed123

## 2.3 Compatibility information

System	Devices
IOS 10.0+	iPhone 6/6Plus/6S/6SPlus ,iPhone 7/7Plus, iPhone 8/8Plus,
	iPhone x/xr/xs/xs max, iPhone SE/SE2,
	iDhono 11/111pro/11 pro may
Android 4.3+	Samsung, XIAOMI, HUAWEI, ONEPLUS, ViVO, OPPO ,etc.

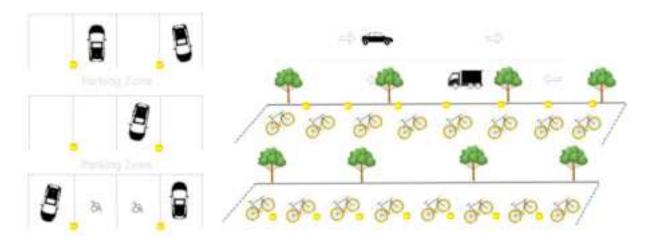


## 3 Deployment

#### Screw installation instructions

According to the deployment needs, the road surface at the installation location should be cleaned and kept away from low-lying and easily flooded roads as much as possible. Try to avoid being crushed by wheels or other obstacles, and avoid being deployed at the rear of the vehicle, between vehicles, and under the entire vehicle to prevent the device signal from being affected.

Make installation positioning marks, use a suitable impact drill bit to drill holes on the surface to be installed, place the expansion plug first, and then use the stainless steel screws in the accessories to lock and fix the device.





### **FCC Certification**

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 warning:

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

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -Reorient or relocate the receiving antenna.
- -Increase the separation between the equipment and receiver.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.



-Consult the dealer or an experienced radio/TV technician for help.

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

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.