

# BLE beacon user manual

(Beacon: HOLYIOT-23022)



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# 1. Introduction

HOLYIOT-23022 beacon use Nordic nRF52 series chip, has good performance at ultra-low power consumption, stable Bluetooth, small size and waterproof. It is widely used for indoor location, asset tracking and proximity marketing in different environmental conditions.

Product shape and size:



Application:

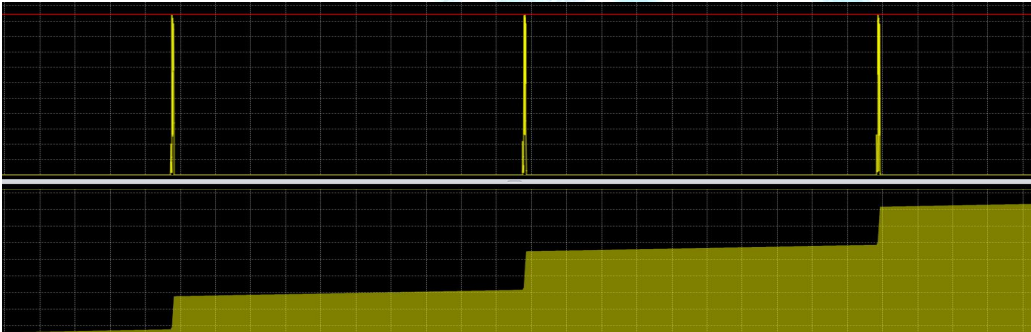
- Proximity Marketing / advertising promotion
- office attendance check in
- Asset tracking / Anti-lost
- Indoor location
- Museum and Hospital

## 2. Features

### 2.1 Physical characteristics

Product	HOLYIOT-23022-V1.0
Bluetooth version	BLE5.0
Chip	nRF52810
Configure APP	Holyiot-beacon
Battery	Rechargeable Lipo battery
Supply voltage	2.0V-3.6V ( best 3.0V )
Frequency range	2402 MHz ~ 2483 MHz
Working Temperature	-20°C ~ 60°C
Battery capacity	420mah

### 2.2 Example of average current data



	0DB(without accelerometer)	+4DB(without accelerometer)	0DB(with accelerometer)	4DB(with accelerometer)
80MS	225uA	242uA	229uA	246uA
300MS	65uA	73uA	69uA	77uA
500MS	40uA	45uA	44uA	49uA
1000MS	22uA	25uA	26uA	28uA

Calculation formula for use time:

$$\text{Use time (days)} = 1000 \times \text{battery capacity (mA}\cdot\text{H)} / \text{average current (uA)} / 24\text{H}$$

## 2.3 Technical parameters

Communication and Protocol	Bluetooth5.0
Radio Transmission Power	-96dB ~ +4dB(default:+4dB)
Radio Transmission Time Interval	80mS ~ 1000mS(default:500mS)
Wireless transmission distance	30 - 50 meters
Supporting Device	IOS7.0 and Android4.3 above
Optional peripheral	Accelerometer chip

## 2.4 Bluetooth broadcast default parameters

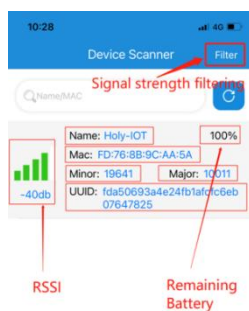
Bluetooth Advertising Name	Holy-IOT
Password	AA14061112
UUID	FDA50693-A4E2-4FB1-AFCF-C6EB07647825
Major	10011
Minior	10012
TX power	+4dB
ADV_interval	500mS
One meter RSSI	-59dB
Mac address	The default is the original processor factory parameters

### 3. How to use APP"Holyiot-beacon"

1. download APP: search "Holyiot-beacon" or scan the QR code to download.



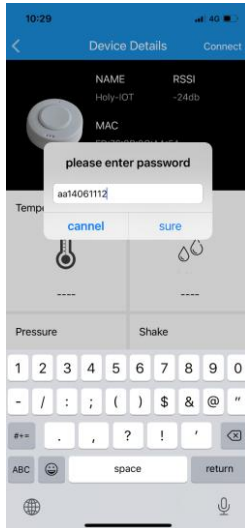
2. turn on the Bluetooth and APP, you can see part of the advertise information of the beacon on the APP;



3. Click to select this beacon to view more advertise information.



4. Click "Connect" , enter password (default: aa14061112).



5. You can see the details and modify the parameters of the beacon;

