

# Sensor Beacon

## FSC-BP121 Datasheet



### 1. Product Brief Information

FSC-BP121 is a Bluetooth 5.1 Temperature and Humidity Sensor Beacon. This product can help to monitor real-time environmental temperature and humidity near the beacon. Operating with Feasycom's FeasyMonitor APP and Gateway Device FSC-BP201, users can take advantage of the remote temperature & humidity monitoring. This product uses CR3032 battery as the power source, the battery life can reach up to 3 Years.

Besides, this product can also act as a regular Bluetooth beacon, simultaneously supports iBeacon, Eddystone (URL and UID), AltBeacon profiles. Working with FeasyBeacon APP, users can set up the broadcast data, broadcast interval, transmit power, etc. Supports up to 10 slots advertising frames.

With the available FREE iOS & Android FeasyBeacon SDK, users can develop their own applications easily.

### 2. Product Image



### 3. Basic Parameters

Item	Description
Chipset	DA14531
Bluetooth Version	Bluetooth 5.1
TX power	-19.5 dBm to +2.5 dBm
Temperature Range	-20°C to +60°C
Humidity Range	0 ~ 100% RH
Typical Humidity Accuracy	2 % RH
Typical Temperature Accuracy	0.2 °C
LED	optional
Button	optional
Keychain	optional
Waterproofing class	IP66
Power Supply	CR3032
Battery Life	UP to 3 Years (ADV Interval = 1300 ms; TX Power = 0 dBm)
Material	ABS plastic
Size	Φ38mm, H:9.6mm
Net weight	15 g

### 4. Battery Life Estimation

Tx Power (dBm)	-19.5	-7	-3.5	0	2.5
Advertising Interval (ms)					
100	271	229	216	204	175
200	542	418	395	365	325
400	834	742	668	640	548
750	1341	1171	1050	998	950
1000	1465	1349	1311	1282	1186
1300	1676	1520	1512	1399	1345
2000	1970	1831	1727	1681	1593
5000	2454	2354	2311	2252	2107
7000	2637	2552	2418	2391	2311

10000	2732	2596	2532	2506	2418
<p><b>Notes:</b> Battery life in <b>days</b> when Applying CR3032 (500 mAh).</p> <p>These values are tested or estimated based on the battery's maximum capacity in a laboratory environment; the battery life might be different in different environments or conditions.</p>					

## 5. Operating Method

Power ON: Long press the button, LED flashes for 3 times, device powered on.

Power OFF: Long press the button until the LED light on steadily, release the button, powered off.

This device can work with Feasycom's FeasyMonitor APP and Gateway Device FSC-BP201 to implement remote monitoring. See more information in < FeasyMonitor APP User Guide > document.

To set up regular beacon operation, please refer to <FeasyBeacon Getting Started Guide > document.

## 6. Declaration

The contents of this datasheet are subject to change without prior notice for further improvement. Feasycom team reserves all the rights for the final explanation.

iBeacon is a trademark of Apple Inc., Eddystone is a trademark of Google Inc.

Please contact Feasycom sales team or visit <https://www.feasycom.com/> to get more related information if needed.

## 7. Contact Information

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## 8. Revision History

Version	Changes	Author	Data
V1.0	Initial Release	Lu Rongzhu	2025-10-11
V1.1	Change the default battery life to 3 years and update the battery life table.	Zoe	2026-03-02

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