

FeasyBeacon

FSC-BP108N Datasheet



1. Description

FeasyBeacon FSC-BP108N is an innovative waterproof IP67 Bluetooth 5.2 Low Energy smart beacon, it simultaneously supports iBeacon, Eddystone (e.g. URL, UID, TLM), AltBeacon for broadcasting and provides the ability to advertise up to 10 slots of advertising frames.

With the iOS & Android FeasyBeacon SDK, the developers can take advantage of the flexibility of the SDK and focus on their own application, such as Broadcast, Proximity Marketing, Digital Signage, Indoor and Outdoor Location, Asset Tracking, Vehicle Tracking, etc. Meanwhile, FeasyBeacon SDK compiled app is available to download from both the iOS and Android platform (search 'FeasyBeacon' to download).

2. Features

- Waterproof, IP67
- Locator-Shape Bluetooth Beacon with design patent
- Bluetooth 5.2 Compliant
- General/NFC/G-sensor optional
- Pre-programmed with Feasycom Smart Beacon Firmware
- Up to 10 slots of Advertising Frames
- Portable Smart Beacon with 2 Years Battery Life (by Default Settings)
- Configurable by Free FeasyBeacon Mobile App and SDK
- Customizable Color, Logo, Hardware, Software

3. Functional Specifications

Item	Description
Advertising Format	Eddystone (URL/ UID/ TLM), iBeacon, AltBeacon
Configuring Method	FeasyBeacon SDK compiled app (e.g. FeasyBeacon app)
Advertising Interval	Default 1300 ms, range from 100 ms to 10000 ms
Security	Access password required, Default Pin Code 000000
Max Number of Broadcast	10 Slots configurable advertising frames
Default Broadcast Interval	1300 ms for iBeacon & Eddystone
System Compatibility	iOS 7.0+, Android 4.3+
Advertising Distance	Up to 500m (open area)
Firmware Upgrading	OTA (upgrade firmware over the air)

4. Product Specifications

Item	Description
Chipset	nRF52832
Bluetooth Version	Bluetooth 5.2
TX power	-40 dBm to +4 dBm
Antenna	Ceramic antenna
Button	Long press central area for power on/off
G-sensor	Optional
NFC	Optional
Power Supply	CR3032
Battery Life	2 Years (ADV Interval = 1300 ms; TX Power = 0 dBm)
Material	ABS plastic
Color	White or customized
Size	48(L)mm x 37(W)mm x 7.8(H) mm
Net weight	14g
Protection	IP67
Operating temperature	-20°C to +60°C

5. Configurable Parameters

Parameters in the below table are configurable by FeasyBeacon SDK compiled app (e.g. FeasyBeacon app), feel free to download FeasyBeacon app from Google Play App Store or iOS App Store.

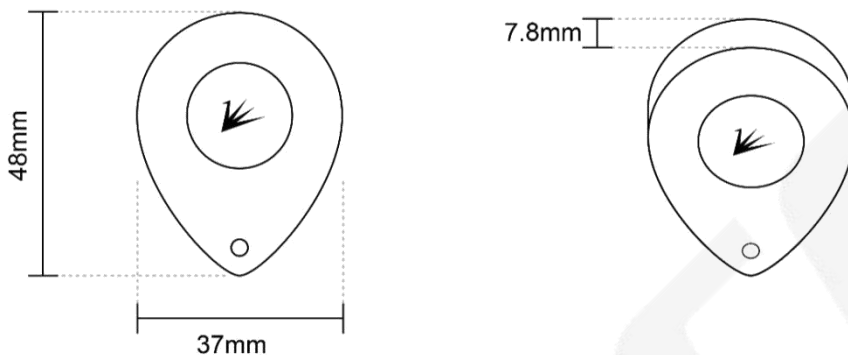
Parameter		Description
Device Name		UTF-8 string, Default: FSC-BP108N-XXXXXX
Pin Code		Access password to FSC-BP108N Default: 000000, Range: 000000 ~ 999999
Advertising Interval		Default: 1300 ms, Range: 100 ~ 10000 ms
Tx Power		Maximum Tx power: +4 dBm Default: 0 dBm, Range: -40 ~ 4 dBm
Eddystone-URL	URL	URL that needed to be advertising
	RSSI at 0m	A 1-byte value representing the average received signal strength at 0m from the advertiser (FSC-BP108N), range: 0 ~ -127
Eddystone-UID	Namespace	10-byte Namespace
	Instance	6-byte Instance
	Reserved	Reserved for future use
	RSSI at 0m	A 1-byte value representing the average received signal strength at 0m from the advertiser (FSC-BP108N), range: 0 ~ -127
iBeacon	UUID	16-byte UUID, e.g. FDA50693A4E24FB1AFCFC6EB07647825
	Major	2-byte Major, range: 0 ~ 65535
	Minor	2-byte Minor, range: 0 ~ 65535
	RSSI at 1m	A 1-byte value representing the average received signal strength at 1m from the advertiser (FSC-BP108N), range: 0 ~ -127
AltBeacon	ID1	Beacon Identifier 1
	ID2	Beacon Identifier 2
	ID3	Beacon Identifier 3
	RSSI at 1m	A 1-byte value representing the average received signal strength at 1m from the advertiser (FSC-BP108N), range: 0 ~ -127
	Manufacturer ID	The beacon device manufacturer's company identifier code
	Manufacturer Reserved	Reserved for use by the manufacturer to implement special features

6. Battery Life & Cover Range Estimation

Tx Power (dBm) Advertising Interval (ms)	-40dBm	-20dBm	-12dBm	-4dBm	0dBm	4dBm
100ms	178	165	160	133	125	91
150ms	244	226	223	181	177	138
200ms	305	284	277	235	221	187
300ms	403	382	379	321	305	253
400ms	486	451	398	394	365	296
550ms	566	523	496	457	447	349
750ms	650	623	600	564	506	430
850ms	685	646	637	593	565	460
1000ms	723	695	682	655	607	515
1300ms	779	759	744	723	668	571
2000ms	869	855	839	804	735	704
3000ms	941	924	915	899	886	783
4000ms	973	957	949	945	927	863
5000ms	1002	985	975	968	938	886
6000ms	1020	1003	989	975	962	930
7000ms	1051	1017	1008	1002	985	954
10000ms	1067	1039	1029	1016	998	989

Notes: Battery life in **days** when Applying CR3032. These values are tested or estimated in the laboratory, the battery life might be different in different environments or conditions.

7. Dimensions



Power on: Long press central area, the light flashes 3 times

Power off: Long press central area, the light keeps on then off



8. 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.

9. Contact Information

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Revision History

Version	Changes	Author
1.0	Initial Release	Fish
1.1	Update Address	Selina
1.2	Update Bluetooth version	Selina