FeasyBeacon

FSC-BP105D Datasheet

1. Description

FeasyBeacon FSC-BP105D is an ultrathin card beacon waterpfoof IP67 with keychain slot.

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

- Card Beacon with design patent
- Bluetooth 5.1 Compliant
- G-Sensor Optional
- Pre-programmed with Feasycom Smart Beacon Firmware
- Up to 10 slots of Advertising Frames
- Portable Keychain Beacon with 7 Years Battery Life (by Default Settings)
- Configurable by Free FeasyBeacon Mobile App and SDK
- Customizable Color, Logo, Hardware, Firmware

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 350m (open area)
Firmware Upgrading	OTA (upgrade firmware over the air)

4. Product Specifications

Item	Description
Chipset	Dialog DA14531
Bluetooth Version	Bluetooth 5.1
TX power	-20 dBm to +4 dBm
Antenna	PCB antenna
Button	Long press the button to power on/off
G-sensor	Optional
Power ON/OFF	Power ON: Long press button, the light flash 3 times Power OFF:Long press button, the light keeps on then off
Power Supply	Li-MnO2 battery (850mAh)
Battery Life	7 Years (ADV Interval = 1300 ms; TX Power = 0)

Material	ABS plastic
Color	White or customized
Size	85.5(L)mm x 54(W)mm x 4.2(H)mm
Net weight	17 g
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.
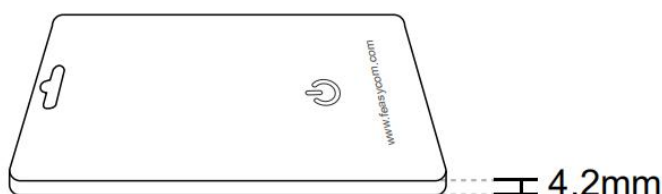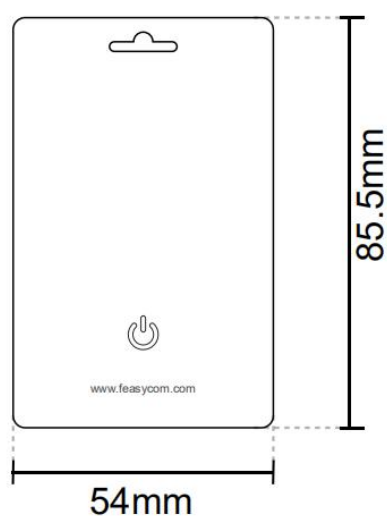
Parameter		Description
Device Name		UTF-8 string, Default: FSC-BP105D-XXXXXX
Pin Code		Access password to FSC-BP105D Default: 000000, Range: 000000 ~ 999999
Advertising Interval		Default: 1300 ms, Range: 100 ~ 10000 ms
Tx Power		Maximum Tx power: +4 dBm Default: 0 dBm, Range: -20 ~ 4 dBm
Eddystone-URL	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-BP105D), 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-BP105D), 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-BP105), 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-BP105D), 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 Estimation

Tx Power (dBm) / Advertising Interval (ms)	-20	-12	0	4
100	309	293	231	181
200	573	536	407	344
400	966	933	739	654
1000	1793	1750	1447	1274
2000	2555	2518	2166	1983
5000	3366	3300	2993	2879
7000	3595	3541	3303	3205
10000	3808	3775	3541	3431

Notes: Battery life in days when Applying DA14531 (850 mAh) . 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 button, the light flashes 3 times

Power off: Long press button, 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

Shenzhen Feasycom Technology Co.,LTD

Address: Rm 508, Building A, Fenghuang Zhigu, No.50, Tiezai Road, Xixiang, Baoan Dist, Shenzhen, 518100, China.

Telephone: 86-755-23062695

Support: support@feasycom.com

Sales Service: sales@feasycom.com

Revision History

Version	Changes	Author
1.1	Initial Release	Selina