# **FeasyBeacon**

#### **FSC-BP104DL** Datasheet



### 1. Description

FeasyBeacon FSC-BP104DL is an ultra-long- range waterproof IP67 Bluetooth 5.2 low-power smart beacon, which supports iBeacon, Eddystone(such as URL, UID, TLM), AltBeacon to broadcast and provide Advertising Capability Up to 10 advertising frame slots.

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 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

- Bluetooth 5.2 Compliant
- Pre-programmed with Feasycom Standard Beacon Firmware
- Up to 10 slots of Advertising Frames
- Portable Small-sized Beacon with 2 years 11 months Battery Life (by Default Settings)
- Configurable by Free FeasyBeacon Mobile App and SDK



- Customizable Color, Logo, Hardware, Software
- Waterproof: IP67
- Up to 1000m in open area

## 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 0 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 iOS 7.0+, Android 4.3+ Up to 1000m (open area)  OTA (upgrade firmware over the air)	
System Compatibility		
Advertising Distance		
Firmware Upgrading		

# 4. Product Specifications

Item	Description	
Chipset	EFR32BG21	
Bluetooth Version	Bluetooth 5.2	
TX power	up to 20dBm	
Antenna F-shape PCB antenna		
Power Supply	2 * AAA (LR03), battery is not included in the package	
Power On	Long press central area for power on / off	
Battery Life	Up to 2 years 11 months (ADV Interval = 1300 ms; TX	
	Power = OdBm, Battery Capacity = 1200mAh)	
Material	ABS plastic	
Color	White or customized  86mm(L)*65.7mm(W)*17.2mm(H)	
Size		
Net weight	27.9 g (Without battery)	
Protection	IP67	
Operating temperature	-20°C to +54°C (DURACELL)	



Certification /

# 5. Power consumption

Power Tx Power (dBm)  Advertising Interval (ms)	0	10	20
100	424.14uA	525.90uA	1.02mA
150	295.62uA	367.32uA	689.40uA
200	214.07uA	276.63uA	515.19uA
300	147.26uA	182.41uA	354.67uA
400	116.59uA	142.77uA	273.13uA
550	95.98uA	118.99uA	219.00uA
750	72.30uA	82.52uA	151.01uA
850	60.59uA	73.87uA	138.70uA
1000	53.08uA	64.43uA	115.59uA
1300	47.57uA	56.79uA	89.99uA
2000	34.24uA	40.14uA	62.59uA
3000	29.82uA	32.26uA	38.99uA
4000	23.41uA	27.36uA	36.07uA
5000	20.42uA	22.14uA	33.97uA
6000	16.28uA	19.56uA	30.51uA
7000	15.04uA	17.34uA	22.42uA
10000	14.65uA	15.28uA	19.72uA

<sup>\*</sup> All battery information depends on the usage environment and many other factors, actual results may vary. The battery validity period is usually 2 years 11 months.



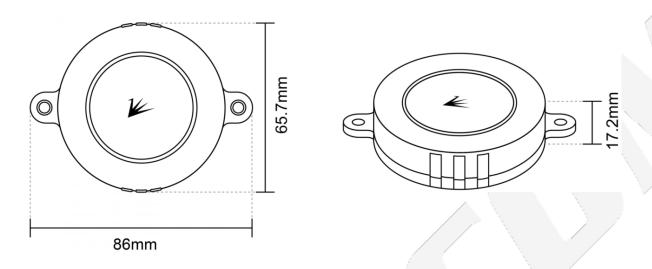
## 6. Configurable Parameters

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-BP104DL	
Pin Code  Advertising Interval  Tx Power		Access password to FSC-BP104DL	
		Default: 000000, Range: 000000 ~ 999999	
		Default: 1300 ms, Range: 100 ~ 10000 ms	
		Default: 0 dBm, Range: -20 dBm ~ +20 dBm	
	URL	URL that needed to be advertising	
Eddystone-URL	D001 + 0	A 1-byte value representing the average received signal strength	
	RSSI at 0m	at 0m from the advertiser (FSC-BP104DL), range: 0 ~ -127	
	Namespace	10-byte Namespace	
	Instance	6-byte Instance	
Eddystone-UID	Reserved	Reserved for future use	
	RSSI at 0m	A 1-byte value representing the average received signal strength	
		at 0m from the advertiser (FSC-BP104DL), range: 0 ~ -127	
	UUID	16-byte UUID, e.g. FDA50693A4E24FB1AFCFC6EB07647825	
	Major	2-byte Major, range: 0 ~ 65535	
iBeacon	Minor	2-byte Minor, range: 0 ~ 65535	
lim.	RSSI at 1m	A 1-byte value representing the average received signal strength	
		at 1m from the advertiser (FSC-BP104DL), range: 0 ~ -127	
	ID1	Beacon Identifier 1	
	ID2	Beacon Identifier 2	
	ID3	Beacon Identifier 3	
AltDooron	RSSI at 1m	A 1-byte value representing the average received signal strength	
AltBeacon		at 1m from the advertiser (FSC-BP104DL), range: 0 ~ -127	
	Manufacturer ID	The beacon device manufacturer's company identifier code	
	Manufacturer	Reserved for use by the manufacturer to implement special	
	Reserved	features	



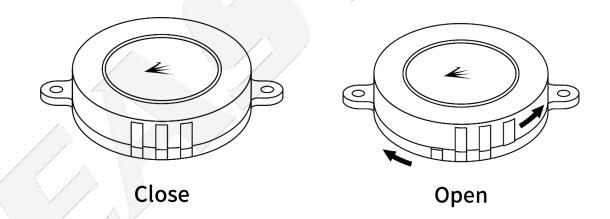
### 7. Dimensions



## 8. Power supply

Hold the handles on both side and rotate the housing the put in 2pcs AAA battery.

Notice: Batteries are to be inserted with the correct polarity





#### 9. 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 <a href="https://www.feasycom.com/">https://www.feasycom.com/</a> to get more related information if needed.

#### 10. Contact Information

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### **Revision History**

Version	Changes	Author
1.0	Initial Release	Devin