

FeasyBeacon

FSC-BP108 Datasheet



1. Description

FeasyBeacon FSC-BP108 is an innovative waterproof IP67 Bluetooth 5.1 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 5.1 Compliant
- With CE, FCC, IC Certification
- Pre-programmed with Feasycom Smart Beacon Firmware
- Up to 10 slots of Advertising Frames
- Portable Smart Beacon with 6 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 400m (open area)
Firmware Upgrading	OTA (upgrade firmware over the air)

4. Product Specifications

Item	Description
Chipset	DA14531
Bluetooth Version	Bluetooth 5.1
TX power	-19.5 dBm to +2.5 dBm
Antenna	Ceramic antenna
Power Supply	CR3032
Power On	Long press central area for power on / off
Battery Life	6 Years (ADV Interval = 1300 ms; TX Power = 0 dBm)
G-Sensor	G-Sensor
Certification	CE, FCC, IC
Material	ABS plastic
Color	White or customized
Size	48(L)mm x 37(W)mm x 7.8(H)mm
Net weight	15g
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-BP108-XXXXXX
Pin Code		Access password to FSC-BP108 Default: 000000, Range: 000000 ~ 999999
Advertising Interval		Default: 1300 ms, Range: 100 ~ 10000 ms
Tx Power		Maximum Tx power: +2.5 dBm Default: 0 dBm, Range: -19.5 ~ 2.5 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-BP108), 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-BP108), 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-BP108), 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-BP108), 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)	-19.5	-7	-3.5	0	2.5
100ms	466	374	325	271	232
150ms	683	541	451	387	319
200ms	821	739	539	491	435
300ms	1314	1031	821	780	644
400ms	1552	1347	1076	993	821
550ms	1920	1696	1359	1236	1122
750ms	2578	2216	1724	1670	1488
850ms	2815	2445	1888	1856	1628
1000ms	3095	2664	2296	2091	1936
1300ms	3767	3296	2627	2465	2221
2000ms	4984	4313	3579	3501	3036
3000ms	6256	5144	4713	4598	4150
4000ms	6677	6038	5600	4936	4789
5000ms	7110	6677	6237	5692	5397
6000ms	7716	6830	6592	6218	5570
7000ms	7832	7440	7110	6510	6091
10000ms	8573	8267	7716	7494	6898

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. Certification

FCC Certificate

TCB

TCB

**GRANT OF EQUIPMENT
AUTHORIZATION**

Certification

**Issued Under the Authority of the
Federal Communications Commission**

By:

**Eurofins Product Service GmbH
Storkower Strasse 38c
D-15526 Reichenwalde,
Germany**

Date of Grant: 11/17/2020

Application Dated: 11/17/2020

**Shenzhen Feasycom Technology Co.,Ltd
Room 2004A, 20th Floor, Huichao Technology
Building, Jinhai Road, Xixiang, Baoan District,,
Shenzhen,
China**

Attention: Wan Zhifu

NOT TRANSFERABLE

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE, and is VALID ONLY for the equipment identified hereon for use under the Commission's Rules and Regulations listed below.

FCC IDENTIFIER: 2AMWOFSC-BP108
Name of Grantee: Shenzhen Feasycom Technology Co.,Ltd
Equipment Class: Digital Transmission System
Notes: Bluetooth Beacon

Grant Notes

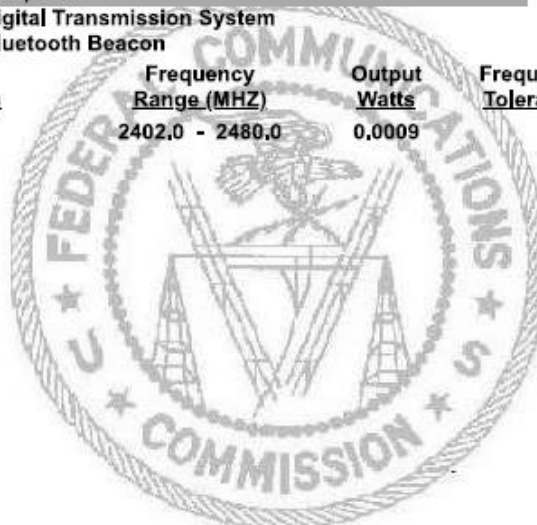
FCC Rule Parts

15C

<u>Frequency Range (MHZ)</u>	<u>Output Watts</u>	<u>Frequency Tolerance</u>
2402.0 - 2480.0	0,0009	

Emission Designator

Output Power listed is peak conducted.



CE Certificate

Shenzhen Tongzhou Testing Co.,Ltd

VERIFICATION OF CONFORMITY

Registration No. : TZ201001761-C

Applicant : Shenzhen Feasycom Technology Co.,LTD

Address : Room 2004A, 20th Floor, Huichao Technology Building, Jinhai Road, Xixiang, Baoan District, Shenzhen, China

Product : Bluetooth Beacon

Trademark : Feasycom

Model(s) : FSC-BP108

Manufacturer : Shenzhen Feasycom Technology Co.,LTD

Address : Room 2004A, 20th Floor, Huichao Technology Building, Jinhai Road, Xixiang, Baoan District, Shenzhen, China

Essential Requirement	Applied Specifications/ Standards	Documentary Evidence	Result
EMC	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-17 V3.2.2 (2019-12) EN 55032:2015 EN 55035:2017	Report TZ201001761-RE	Conform
Radio	ETSI EN 300 328 V2.2.2 (2019-07)	Report TZ201001761-BLE	Conform
Health	EN 62479:2010	Report TZ201001761-EMF	Conform
Safety	EN 62368-1:2014+ A11: 2017	Report TZ201001761-S	Conform

The EUT described above has been tested by us with the listed standards and found in compliance with the council RED 2014/53/EU. It is possible to use CE marking to demonstrate the compliance with the Directive. The scope of evaluation relates to the submitted documents only.





Andy Zhang

For Chief Executive

November 12, 2020

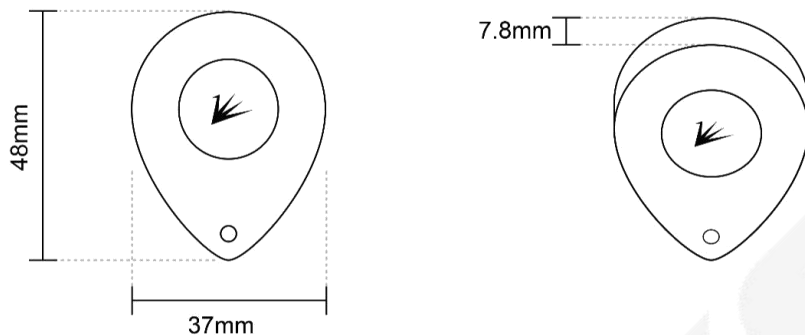
Website: www.sztz-testing.com

E-mail: sztz@sztz-testing.com

IC Certificate

		Project No: K7M22011-0034 Date: 2020-11-18 Page 1 of 2	
Product Service			
<h2>Technical Approval Certificate</h2> <h3>Certificat d'Approbation Technique</h3>			
based on the Comprehensive Economic and Trade Agreement (CETA) between the European Community and Canada <i>en se basant l'accord Économique et Commercial Global (CETA) entre la Communauté Européenne et le Canada</i>			
<h3>Eurofins Product Service GmbH</h3> CAB Identifier: DE0004			
CERTIFICATE NUMBER (TAC No.) <i>Numéro de certificate (N° CAT)</i>		DE-04-11820W	
CERTIFICATION NO. <i>Numéro de certification</i>		IC: 23872-FSCBP108	
TYPE OF CERTIFICATION SERVICE <i>Type de service de certification</i>		New Single Certification	
CERTIFICATE HOLDER <i>Titulaire du certificat</i>		Shenzhen Feasycom Technology Co., LTD Room 2004A, 20th Floor, Huichao Technology Building, Jinhai Road, Xixiang, Baoan District, Shenzhen, China	
TYPE OF EQUIPMENT <i>Genre de matériel</i>		Spread Spectrum or Digital Device (2400-2483.5 MHz)	
HARDWARE VERSION IDENTIFICATION NUMBER (HVIN) <i>Numéro d'identification de la version du matériel (NIVM)</i>		FSC-BP108	
PRODUCT MARKETING NAME (PMN) <i>Nom de marque du produit (NMP)</i>		Bluetooth Beacon	
FIRMWARE VERSION IDENTIFICATION NUMBER (FVIN) <i>Numéro d'identification de la version du logiciel (NIVL)</i>		V5.2.8	
HOST MARKETING NAME (HMN) <i>Nom de marque de l'hôte (NMH)</i>		N/A	
TESTING LABORATORY <i>Coordonnées du laboratoire d'essai</i>		SHENZHEN TONGZHOU TESTING CO., LTD 1st Floor, Building 1, Haornai High-tech park, Huating Road 387, Dalang street, Longhua, Shenzhen, P.R.C.	
		Contact details: Andy Zhang Phone: -/ Fax: -/ Email: Andy.Zhang@sztz-testing.com	
WIRELESS DEVICE TESTING LABORATORY ID (ISED#) <i>Laboratoire d'essais des appareils sans fils ID (ISDE#)</i>		22033	
NOTES:		-/-	
Technical Specifications – please refer to the following page(s).			
Eurofins Product Service GmbH Storkower Strasse 38c, 15528 Reichenwalde, Germany Phone +49 33631 888 000 Fax +49 33631888 650, E-Mail: certifiers@eurofins.com			

8. Dimensions



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

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



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 <https://www.feasycom.com/> to get more related information if needed.

10. Contact Information

Shenzhen Feasycom Technology Co.,LTD

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Telephone: 86-755-23062695

Support: support@feasycom.com

Sales Service: sales@feasycom.com

Revision History

Version	Changes	Author
1.0	Initial Release	Devin
1.1	Update Description Update Specifications	Jerry
1.2	Update Description	Tim
1.3	Update Description Update Specifications	Tim
1.4	Update Description Update Specifications	Fish
1.5	Add FCC、CE、IC Certificates	Fish
1.6	Update Address	Selina