

FeasyBeacon

FSC-BP109 Datasheet



1. Description

FeasyBeacon **FSC-BP109** is a USB powered super long range beacon. It simultaneously supports iBeacon, Eddystone (e.g. URL, UID), AltBeacon for broadcasting and provides the ability to advertise up to 10 slots of advertising frames. Transmit distance up to 4000m.

FeasyBeacon Super BP109 is designed to solve the poor cover range problem, suitable for application scenarios like stadium, museum, exhibition, hotel, restaurant, etc.

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

- Up to 4000m Super Long Range in Open Space
- Qualcomm CSR8811 Chipset, Bluetooth 4.2
- Pre-programmed with Feasycom Standard Beacon Firmware



- Up to 10 slots of Advertising Frames
- Configurable by Free FeasyBeacon Mobile App and SDK
- Customizable Color, Logo, Hardware, Software

3. Functional Specifications

Item	Description
Advertising Format	Eddystone (URL/ UID), iBeacon, AltBeacon
Configuring Method	FeasyBeacon SDK compiled app (e.g. FeasyBeacon app)
Advertising Interval	Default 100 ms, range from 100 ms to 2000 ms
Security	Access password required, Default Pin Code 000000
Max Number of Broadcast	10 Slots configurable advertising frames
Default Broadcast Interval	100 ms for iBeacon & Eddystone
System Compatibility	iOS 7.0+, Android 4.3+
Advertising Distance	Up to 4000m (open area)
Firmware Upgrading	OTA (upgrade firmware over the air)

4. Product Specifications

Item	Description
Chipset	Qualcomm CSR8811
Bluetooth Version	Bluetooth 4.2
TX power	+18.5 dBm
Antenna	Whip Antenna (SMA interface)
Power Supply	5V USB
MCU Core	ST ARM 32-bit Cortex-M4 CPU
Material	ABS plastic
Color	Black, or customized
Size	285(L)*38(W)*22(H)mm
Net weight	54 g
Protection	IP40
Operating temperature	-20°C to +85°C
Certification	CE, ROHS, FCC

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-BP109-XXXXXX
Pin Code		Access password to FSC-BP109 Default: 000000, Range: 000000 ~ 999999
Advertising Interval		Default: 100 ms, Range: 100 ~ 2000 ms
Tx Power		Maximum Tx power: +18.5 dBm Default: +18.5 dBm
Eddystone-URL	URL	URL that needed to be advertised
	RSSI at 0m	A 1-byte value representing the average received signal strength at 0m from the advertiser (FSC-BP109), 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-BP109), 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-BP109), 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-BP109), 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. Certifications

FCC Certificate (USA)

TCB

**GRANT OF EQUIPMENT
AUTHORIZATION**

TCB

Certification
 Issued Under the Authority of the
 Federal Communications Commission
 By:

Intertek Testing Services NA, Inc.
 70 Codman Hill Road
 Boxborough, MA 01719

Date of Grant: 12/13/2017
 Application Dated: 12/13/2017

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

Attention: Wan Zhifu

NOT TRANSFERABLE

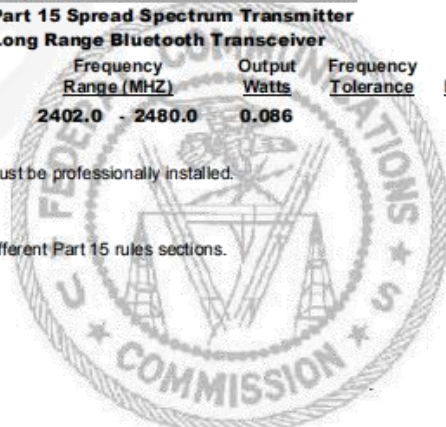
EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE,
 and is VALID ONLY for the equipment identified hereon for use under the
 Commission's Rules and Regulations listed below.

FCC IDENTIFIER: 2AMWO-FSC-BP109
Name of Grantee: Shenzhen Feasycom Technology Co.,Ltd
Equipment Class: Part 15 Spread Spectrum Transmitter
Notes: Long Range Bluetooth Transceiver

<u>Grant Notes</u>	<u>FCC Rule Parts</u>	<u>Frequency Range (MHZ)</u>	<u>Output Watts</u>	<u>Frequency Tolerance</u>	<u>Emission Designator</u>
CC	15C	2402.0 - 2480.0	0.086		

Output power listed is conducted. This device must be professionally installed.
 The highest reported SAR is 0.71 W/kg.

CC: This device is certified pursuant to two different Part 15 rules sections.



CE Certificate (EU)



Attestation of Global Compliance
 Recognized by China National Accreditation Service for
 Conformity Assessment & Taiwan Accreditation
 Foundation

T: 0086-755-2908 1955
 F: 0086-755-2600 8484
 E-mail: agc@agc-cert.com
 Web: Http://www.agc-cert.com

2F., Building 2, No 1-No.4, ChaxiSanwei
 Technical Industrial Park, Gushu, Xixiang Street
 Baoan District, Shenzhen, P. R. China (518000)

EU-RED Certificate of Conformity

Radio Equipment Directive (RED) 2014/53/EU

Registration No. AGC01249171001E0
 Certificate Holder Shenzhen Feasycom Technology Co.,LTD
 Room 2004A,20th Floor, Huichao Technology Building,
 Jinhai Road, Xixiang , Baoan District, Shenzhen, China.
 Product Designation Long Range Bluetooth Transceiver
 Brand Name Feasycom
 Model / Series Models FSC-BP109
 Manufacturer Shenzhen Feasycom Technology Co., LTD
 Room 2004A,20th Floor,Huichao Technology Building,
 Jinhai Road, Xixiang , Baoan District, Shenzhen, China.

Requirement	Applied Standards	Document Evidence	Result
Art.3.1(a) Health	EN 62209-2:2010; EN 50566:2013	Test Report: AGC01249171001EH01	Conform
Art.3.1(a) Safety	EN 60950-1:2006+A11:2009 +A1:2010+A12:2011+A2:2013	Test Report: AGC01249171001ES01	Conform
Art.3.1(b) EMC	Draft EN 301 489-1 V2.2.0 Draft EN 301 489-17 V3.2.0	Test Report: AGC01249171001EE01	Conform
Art.3.2 Radio	EN 300 328 V2.1.1	Test Report: AGC01249171001EE04	Conform
		Test Report: AGC01249171001EE11	Conform




Signed by Quality Manager
 Issue Date: Dec. 06, 2017



Recognized by Attestation of Global Compliance (Shenzhen) Co., Ltd., in accordance with the RED Directive 2014/53/EU, The certificate doesn't imply assessment of the production. The Applicant of the certificate is authorized to use this certificate in connection with EC declaration of conformity to the Directive. The certificate is only applicable to the equipments described above. This certificate shall not be re-produced except in full without the written approval of Attestation of Global Compliance (Shenzhen) Co., Ltd.

Note: This certificate is part of the full test report(s) and should be used in conjunction with it.

Version: 2.0



RoHS Certificate(EU)



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 Conformity Assessment & Taiwan Accreditation
 Foundation

Tel: 0086-755-83563833
 Fax: 0086-755-25316612
 E-mail: agc@agc-cert.com
 Web: Http://www.agc-cert.com

Unit 2, Meihua Road 171,
 Shangmeilin Street, Futian District,
 Shenzhen City, China (518000)

Certification of Product Declarations

Registration No.: A001E20171115042C8
 Certificate Holder: Shenzhen Feasycom Technology Co.,LTD
 Room 2004A,20th Floor,Huichao Technology
 Building,JinhaiRoad,Xixiang ,BaoanDistrict,Shenzhen,China.
 Product Designation: Long Range Bluetooth Transceiver
 Brand Name: Feasycom
 Model / Series Models: FSC-BP109
 Manufacturer: Shenzhen Feasycom Technology Co.,LTD
 Room 2004A,20th Floor,Huichao Technology
 Building,JinhaiRoad,Xixiang ,BaoanDistrict,Shenzhen,China.

Requirement	Applied Standards	Document Evidence	Result
2011/65/EU	IEC 62321-3-1:2013 Ed 1.0 IEC 62321-5:2013 Ed 1.0 / IEC 62321-4:2013 Ed 1.0 IEC 62321-7-2:2017 Ed1.0 IEC 62321-7-1:2015 Ed1.0 / IEC 62321-6:2015 Ed1.0	Test Report: A001E20171115042	Conform



Lewis

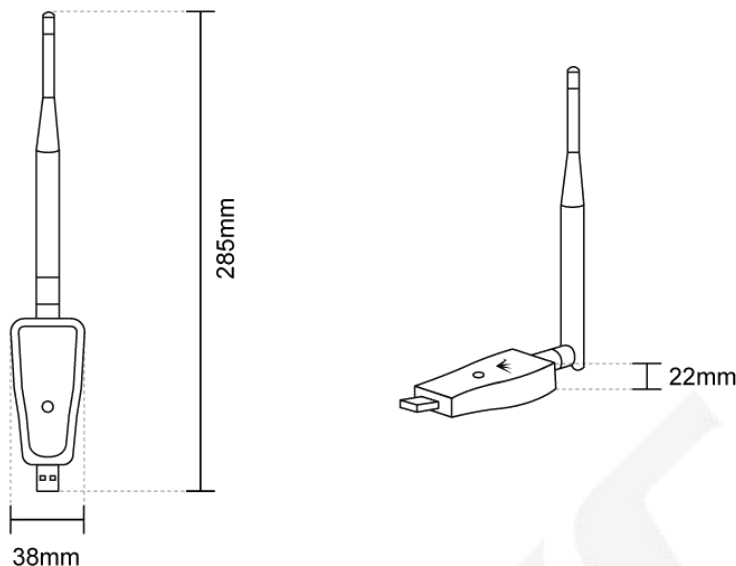
Signed for and on behalf of AGC
 Issue Date: Nov.23, 2017

Recognized by Attestation of Global Compliance (Shenzhen) Co., Ltd. in accordance with the EC Council 2011/65/EU. The certificate doesn't imply assessment of the production. The Applicant of the certificate is authorized to use this certificate in connection with EC declaration of conformity to the Directive. The certificate is only applicable to the equipments described above. This certificate shall not be re-produced except in full without the written approval of Attestation of Global Compliance (Shenzhen) Co., Ltd.

- Note:**
1. This certificate is part of the full test report(s) and should be used in conjunction with it.
 2. As specified by client, testing the mandatory requirement section.



7. Dimensions



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 District, Shenzhen, 518102, China
Tel: 86-755-27924639, 86-755-23062695

Support: support@feasycom.com

Sales Service: sales@feasycom.com

Revision History

Version	Changes	Author
1.0	Initial Release	Devin
1.7	Update specifications	Lynn
1.8	Update description Update specifications Document reorganization	Tim