

TagBeacon Datasheet

Model No.: JW1407B

V1.0.3

updated on 2024-04-27

Model	Description
JW1407B	Tag Beacon, droplet shape, IP67 waterproof, strong case with 4 screws, 3 years battery life, white/black/blue/pink, includes 1pc CR2477 or CR2450 coin battery, CE & RoHS & FCC-ID certification

JW1407B is a low energy Bluetooth® 4.2 digital broadcasting device, it is designed for the commercial advertising, indoor location-based service, event monitor, asset tracking etc.

The TagBeacon JW1407B broadcasts standard iBeacon/Eddystone data at regular and adjustable intervals, it can be heard and interpreted by iOS and Android BLE-enabled devices that are equipped with many mobile apps. A BLE gateway can scan and communicate with TagBeacon JW1407B too.

FEATURES

- Programmed standard iBeacon/Eddystone firmware
- 3 years battery lifetime at default settings
- The max. 50 meters advertising distance
- Small size, user-friendly and portable
- Easy to print the logo on the center of top case
- Paste QR code label on case(MAC address etc.)



CERTIFICATIONS

- RoHS
- CE
- FCC-ID

SPECIFICATION

JW1407B TagBeacon

Compatibility

- Supported iOS 7.0+ and Android 4.3+ system;
- Compatible with Apple iBeacon standard;
- Compatible with all Bluetooth® 4.0+ (BLE) devices;

Replaceable battery and Battery Level

- Replaceable coin battery;
- Easy to get the real-time battery level notification;

Soft Reboot

- Reboot after saving new working parameters when configuring.

OTA and J-Link

- Upgrade via Over-The-Air supported;
- Reserved J-Link port for programming;

Configurable Parameters

- UUID, Major, Minor, Device Name, TX power, Transmission interval.

- Special Configuration APP 'Joyway Beacon';

Transmission Power Levels

- 8 adjustable levels
- Transmission power range: -30dBm to +4dBm;

Security

- Need input password when configuring;
- AES HW encryption

Wearable

- Key chain / Neck-string option;

Connection Mode

- Connectable and configurable all the time;

HOW IT WORKS

- (1) JW1407B TagBeacon activates once battery is installed. It advertising iBeacon data continuously using permanently stored parameters, which will not stop until battery die.
- (2) Reinstall battery to reboot.
- (3) No need to configure again after changing battery, since parameters are stored permanently.
- (4) Always connectable, but need password to keep connection and configure parameters. It disconnects mobile phone automatically if password is wrong or waiting for password over 30 seconds.

CONFIGURABLE WORKING PARAMETERS

Item	Default Settings		Note
UUID	0x59,0x1f,0xcd,0x82, 0xfd,0x55,0x46,0x0b, 0x86,0xd5,0x29,0x6b, 0x1b,0x1e,0x54,0x96		16 bytes
Major	Random value		2 bytes, Range: 0~65535
Minor	Random value		2 bytes, Range: 0~65535
TX Power	0dBm		-30, -20, -16, -12, -8, -4, 0, 4 dBm
Transmission Interval	2000ms		100~10000ms
Device Name	Configure mode	Always 'JOYWAY', can not be changed.	Max 12 bytes.
	Working mode	Default 'JOYWAY', can be changed.	JW1407B does not enter this mode
	Button event mode	'CLK=N', 'N' means how many button clicks happened when in 1.5 seconds by the user.	JW1407B has no buttons, so no this mode.

SIGNAL LEVEL & COVER RANGE

TX Power (dBm)	Rough Range (meters)
+4	50
0	30
-4	14
-8	13
-12	7
-16	4
-20	2
-30	0.5

ELECTRONIC PARAMETERS

Item	Value	Remarks
Case Color	Black/White	Customize color if ≥ 3000 pcs
Battery Model	1 x CR2477 or CR2450	1pc CR2477 / CR2450 coin battery, 3.0V
Operation Voltage	1.8~3.6V	DC
Transmission Current	9.5mA(Max.)	Test at 0dBm transmission power
Transmission Range	50 meters(Max.)	Also depending on receiver antenna performance.
Antenna	50ohm	On board / PCB Antenna
Net Weight	17.5g	With battery
Size	49.5x30x13.5 mm	Null

TECHNICAL SUPPORT

Item	File Name
Datasheet	JW1407B_TagBeacon_Datasheet.pdf
SDK	JoywayLib.Android.zip; JoywayLib.iOS.zip
Configuration Tools	JoywayBeacon.apk

PACKING INFORMATION

Details	PP Bag	Carton
Quantity(JW1407B)	1 pc	200 pcs
Net Weight	17.5 g	3.5 kg
Gross Weight	17.9 g	3.84 kg
Size	60x90x13.8 mm	260x150x180 mm

DECLARATION

The contents of this datasheet are subject to change without prior notice for further improvement. Joyway team reserves the right to explain all the terms of this datasheet.

CONTACT JOYWAY

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