



GLOWBIRD Beacon

GB2110 V1.0

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Please contact GlowBird sales team or visit <https://www.glowbird.com/> to get more related information if needed.

Revision History

Version	Data	Changes	Author
V1.0	2025-12-18	Initial Release	Zoe

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1. Description

GlowBird Beacon GB2110 is a battery-powered Bluetooth 5.1 Low Energy proximity-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 GlowBird Beacon 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, GlowBird Beacon SDK compiled app is available to download from both the iOS and Android platform (search 'GlowBird Beacon' to download).

2. Features

- Bluetooth 5.1 Compliant
- Pre-programmed with GlowBird Standard Beacon Firmware
- Up to 10 slots of Advertising Frames
- Portable Small-sized Beacon with 6 years Battery Life (by Default Settings)
- Configurable by Free GlowBird Beacon Mobile App and SDK
- Customizable Color, Logo, Hardware, Software

3. Functional Specifications

Item	Description
Advertising Format	Eddystone (URL/ UID/TLM), iBeacon, AltBeacon
Configuring Method	GlowBird Beacon SDK compiled app (e.g. GlowBird Beaconapp)
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 & TLM
System Compatibility	iOS 7.0+, Android 4.3+
Advertising Distance	Up to 550m (open area)
Firmware Upgrading	OTA (upgrade firmware over the air)

4. Product Specifications

Item	Description
Chipset	FSC1031
Bluetooth Version	Bluetooth 5.1
TX power	+2 dBm (Max)
Antenna	PCB Coil antenna
G-Sensor	Optional
Power Supply	2 * AAA (LR03), battery is not included in the package
Battery Life	6 Years (ADV Interval = 1300 ms; TX Power = 0 dBm)
Material	ABS plastic
Color	White or customized
Size	Diameter 62.2 mm, height 18.8 mm
Net weight	46g
Operating temperature	-20°C to +60°C

5. Battery Life & Cover Range Estimation

Advertising Interval (ms)	TX Power(dBm)	-20	-4	0	2
100	479	417	397	385	
200	869	754	724	690	
400	1530	1340	1287	1235	
750	2350	2221	2055	1973	
1000	2715	2530	2433	2346	
1300	3130	2901	2850	2768	
2000	3748	3599	3531	3484	
5000	4849	4757	4686	4633	
7000	5175	5081	5015	4965	
10000	5411	5353	5291	5285	

6. Configurable Parameters

Parameters in the below table are configurable by GlowBird Beacon SDK compiled app

(e.g. GlowBird Beacon app), feel free to download GlowBird Beacon app from Google Play App Store or iOS App Store.

Parameter		Description
Device Name		UTF-8 string, Default: GB2110
Pin Code		Access password to GB2110 Default: 000000, Range: 000000 ~ 999999
Advertising Interval		Default: 1300 ms, Range: 100 ~ 10000 ms
Key	Temporary short advertising interval	Temporary short advertising interval after button pressed, this feature is useful when the normal advertising interval set to a very long time (which makes it hard to create connection with the beacon), Default: 100 ms, Range: 0 ~ 10000 ms
	Restore Time	The time that temporary short advertising interval taking effect, Default: 35000 ms, Range: 1000 ~ 65535 ms
Tx Power		Maximum Tx power: +2 dBm, Default: 0 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 (GB2110), 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 (GB2110), 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 (GB2110), 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 (GB2110), 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

7. Dimensions

