Beacon / iBeacon / MiniBeacon

Datasheet V1.01

Model	Description
C3-B	Black casing, mini USB iBeacon, RoHS
C3-W	White casing, mini USB iBeacon, RoHS

The Mini USB iBeacon C3 is a mini USB iBeacon with ARM core chipset nRF51822 and leverage BLE 4.0 technology; it is powered by USB slot, accurate hardware and robust firmware. It is designed for the commercial advertising and indoor location-based service.

Minew Beacons broadcast 2.4GHz radio signals at regular and adjustable intervals. MiniBeacon can be heard and interpreted by iOS and Android BLE-enabled devices that are equipped with many mobile apps.

FEATURES

- **Programmed MiniBeacon standard firmware**
- **Mini USB iBeacon;**
- **The max. 60 meters advertising distance**
- **Ultra-low power consumption chipset nRF51822 with ARM core**
- **Plug and play;**

C3 Mini USB iBeacon
Image 1

CERTIFICATIONS

- **iBeacon MFi License (iBC-14-00582)**
- **FCC Regulation (FCC Part 15.)**
- **CE Regulations (Included EN300328/301489/60950/62479**)

SPECIFICATION

Compatibility

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

No Battery Needed

- No battery needed, powered by USB slot;

Soft-reboot

- Reboot the device via command without any tools;

OTA and J-Link

- Supported upgrade via Over-The-Air;
- Reserved J-Link port on the board for programming;

Connection Mode

- Advertising mode, non-connectable;
- Configuration mode, connectable;

Configurable Parameters

- UUID, Major, Minor, Device Name, Password etc.
- Special Configuration APP;

Transmission Power Levels

- 8 adjustable levels, range from 0 to 7
- Transmission power range: -30dBm to +4dBm;

Long Range

- The max. Range 40 meters in the open space;
- The range depends on the physical environment;

Security

- 8 characters password (Lock/Unlock parameters);
- Broadcast the encrypted data if needed;
- AES HW encryption

Easy to Deployment

- Plug and play;

CONFIGURABLE PARAMETERS

Characteristic	Item	Default Settings
0xFFF1	UUID	E2C56DB5-DFFB-48D2-B060-D0F5A71096E0 (Proximity)
0xFFF2	Major	0
0xFFF3	Minor	0
0xFFF4	Measured Power	-59 (0xC5)
0xFFF5	Transmission Power	7 (4dBm)
0xFFF6	Change Password	minew123 (Must be 8 characters)
0xFFF7	Broadcasting Interval	1(100mS)
0xFFF8	Serial ID	Random (Unique serial ID for beacon)
0xFFF9	iBeacon Name	MiniBeacon_ (the maximum 14 characters)
0xFFFE	Connection Mode	0 (connectable, configuration mode)
0xFFFF	Soft Reboot	minew123 (it is same as the value of Change Password)

ELECTRONIC PARAMETERS

Item	Value	Remarks
Case Color	White, Black	Other colors can be customized
Battery Model	Null	Powered by USB slot
Operation Voltage	4.5-5.5V	DC
Transmission Circuit	10.5mA (Max.)	Tested at 0dBm transmission power
Transmission Range	60 meters	Maximum
Antenna	50ohm	On board / PCB Antenna
Net Weight	2.0g	With battery but without package
Size	18 x 14 x 6 mm	Null

TECHNICAL SUPPORT

Item	Version	File Name	Updated Date
Datasheet	V1.01	C3_MiniBeacon Datasheet_1.01.pdf	25th May, 2015
Instruction	V2.03	Instructions_MiniBeacon_V2.03.pdf	25th May, 2015
SDK	V1.0	Android Reference Source Code; iOS Reference Source Code;	28th February, 2015
APP Tools	V2.0	iBeaconCFG; iBeaconDFU;	3rd March, 2015

* Minew sales team will send you these documents after the sample arrived.

PACKING INFORMATION

Details	Box	Carton
Quantity(C3)	80pcs per box	800pcs per carton
Net Weight	0.16Kg	1.6Kg
Gross Weight	0.40Kg	4.5Kg
Size	30.5 x 11 x 7.5 cm	32 x 23 x 40 cm

APPDENDIX

1. J-LINK Programmer Kit;
2. Over-the-Air Function;

Please contact Minew sales team to ask more related information if needed.

DECLARATION

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

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct theinterference by one or more of the following measures:
--Reorient or relocate the receiving antenna.
--Increase the separation between the equipment and receiver.
--Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
--Consult the dealer or an experienced radio/TV technician for help.
This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2)This device must accept any interference received, including interference that may cause undesired operation.
Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. such modifications could void the user's authority to operate this equipment.
Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device is measured RF output power is less than the SAR exclusion threshold value for human head and body . Therefore, SAR test is not necessary.

<END>