iBeacon & Eddystone

(Digital Broadcasting Device)

Datasheet V1.0

Model	Description
C6	Round shape, white casing, CE&FCC certified iBeacon & Eddystone, powered by a coin battery CR2032, RoHS

The iBeacon&Eddystone (digital broadcasting device) C6 is designed based on the Low Energy Bluetooth 4.0 technology; it is a wearable tag that supports to attach it to somebody by neck-string or keychain.

C6 broadcasts the data at regular and adjustable intervals according to Apple' standard iBeacon protocol, it can be heard and interpreted by iOS and Android BLE-enabled devices that are equipped with many mobile apps. It widely used for the trade shows, conferences, events and so on.

FEATURES

- **Programmed MiniBeacon standard firmware**
- **The max. 80 meters advertising distance**
- **Easy to print the logo on the case**
- **Wearable optional: neck-string and keychain**
- **Ultra-low power consumption chipset nRF51822 with ARM core**
- **Powered by a small coin battery CR2032, battery replaceable**

CERTIFICATIONS

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

iBeacon & Eddystone C6

Image 1

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;

Long Battery Lifetime and Battery Level

- 6 months @ default settings;
- Easy to get the real-time battery level notification;

Soft-reboot

- Reboot the device via command without any tools;

Connection Mode

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

Programming Ports J-Link

- Reserved the J-Link port on the board;
- Re-programming the FW into board via J-Link;

Configurable Parameters

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

Transmission Power Levels

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

Long Range

- The max. Range 100 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

TURN ON C6

Please DO take out the battery sheet from the beacon device before using.

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	6 (0dBm)
0xFFF6	Change Password	minew123 (Must be 8 characters)
0xFFF7	Broadcasting Interval	9(900mS)
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	Other colors can be customized
Battery Model	1pc x CR2032	Coin battery, 1pc x 3.0V
Operation Voltage	1.8-3.6V	DC
Transmission Circuit	10.5mA (Max.)	Tested at 0dBm transmission power
Transmission Range	80 meters	Maximum
Antenna	50ohm	On board / PCB Antenna
Accessories	Double adhesive	1pc, high-strength, 3M brand;
Net Weight	16.0g	With battery
Size	42 x 31 x 11 mm	Null

TECHNICAL SUPPORT

Item	Version	File Name	Updated Date
Datasheet	V1.0	C6_MiniBeacon Datasheet_1.0.pdf	10th August, 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.

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.   **<END>**

FCC Caution：

This device complies with part 15 of the 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.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses 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 the interference 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.