

# STICKBeacon Datasheet

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## 1. Revision History

Revision	Description	Approved	Date
V1.0	Initial Release	Kevin	2018.05

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## 2. Description

The STICKBeacon is a portable iBeacon tag with ultra low power ARM chipset **nRF52832** and leverage BLE 4.0 technology; it has a portable case shape, accurate hardware and robust firmware . It is designed for the commercial advertising and indoor location-based service. STICKBeacon broadcasts 2.4GHz radio signals at regular and adjustable intervals. STICKBeacon can be heard and interpreted by iOS and Android BLE-enabled devices that are equipped with many mobile apps.



## 3. Features

- Programmed Moko standard iBeacon firmware;
  - The max. 30 meters advertising distance;
  - Ultra-low power consumption chipset nRF52832 with ARM core;
  - Easy to print a customization logo/branding on the case.
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## 4. Specification

### 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

- High quality replaceable CR2032 coin battery(230mAh);
- More than 1 years battery lifetime (at default settings);
- Easy to get the real-time battery level notification.

### Configurable Parameters

- UUID, Major, Minor, Device Name, Device ID, Password, Advertising Interval, RSSI@0m, Tx Power etc;
- Special Configuration APP(**MokoBeacon**, Pls visit <http://doc.mokotechnology.com/index.php?s=/16> for more ).

### Transmission Power Levels

- 9 adjustable grades;
- Transmission power range: -40dBm to +4dBm.

### Long Range

- The max. Range 30 meters in the open space;
- The range depends on the physical environment.

### Security

- 8 characters password (Lock/Unlock parameters).

## Low power reminder

- Led flashes every 10 seconds if the battery capacity is under 5%.

## Connection Mode

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

## OTA and DFU

- Supported upgrade via Over-The-Air;
- Nordic official Device Firmware Upgrade(DFU);
- Reserved J-Link port on the board for programming.

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## 5. Configurable parameters

Characteristic	Item	Default Setting
0xFF01	UUID	FDA50693-A4E2-4FB1-AFCF-C6EB07647825
0xFF02	Major	0
0xFF03	Minor	0
0xFF04	Measured Power (RSSI@ 1m)	-59dBm
0xFF05	TX Power	-16dBm
0xFF06	Password	Moko4321
0xFF07	Advertising Interval	1000ms
0xFF08	Serial ID	00000-99999, 5 numbers
0xFF09	Device Name	S, 4 characters max, only letters, numbers and underscores
0xFF0E	Connection Mode	0 (Connectable)
0xFF0F	Soft Reboot	Moko4321 (It is same as the value of password)

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## 6. Electronic parameters

Item	Value	Remarks
Case Color	White	Other colors can be customized
Battery Model	CR2032	Coin battery, 1pc, 230mAh
Operation Voltage	1.8-3.6V	DC
Waterproof level	IP67	
Transmission Current	53.3uA	Tested at -4dBm transmission power and 1000ms Advertising Interval
Average Current	23.35uA	Tested at -4dBm transmission power and 1000ms Advertising Interval
Transmission Range	30m(+4dBm)	The range depends on the physical environment
Antenna	50ohm	On board/PCB Antenna
Size	25.93x25.93x6.6mm	--
Net Weight	5.4g	With battery

## 7. Technical support

Item	File Name	Remarks
Configure APP for IOS&Android	MokoBeacon	<a href="http://doc.mokotechnology.com/index.php?s=/page/38">http://doc.mokotechnology.com/index.php?s=/page/38</a>
SDK for APP	--	<a href="http://p29zydyfu.bkt.clouddn.com/MokoBeacon%20APP%20SDK20180122.rar">http://p29zydyfu.bkt.clouddn.com/MokoBeacon%20APP%20SDK20180122.rar</a>
Datesheet	STICKBeacon Datasheet	<a href="http://doc.mokotechnology.com/index.php?s=/page/104">http://doc.mokotechnology.com/index.php?s=/page/104</a>

## FCC Statement

**1. 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.**

**2. The statements should be displayed in the user manual: changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.**

**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.

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## **Declaration**

The contents of this datasheet are subject to change without prior notice for further improvement. MOKO team reserves all the rights for the final explanation. Please contact MOKO sales team or visit <http://www.mokosmart.com> to get more related information if needed.

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