# Beacon / iBeacon / MiniBeacon

**Model Number: BLE-USB** 

Model	Description
36509 LBS-BLE-USBU	Bluetooth beacon - USB - not provisioned
36510 LBS-BLE-USBP	Bluetooth beacon - USB -fully provisioned
36519 LBS-BLE-USBU-100	Bluetooth beacon - USB - not provisioned (100-Pack)
36520 LBS-BLEUSBP-100	Bluetooth beacon - USB -fully provisioned (100-Pack)

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The Mini USB iBeacon 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;





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<sup>™</sup> 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;

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# **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

<sup>\*</sup> Minew sales team will send you these documents after the sample arrived.

### **PACKING INFORMATION**

Details	Вох	Carton
Quantity	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.

<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.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

## IC Caution:

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux apparei ls radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

L'appareil a été évalué pour répondre aux exigences générales d'exposition RF. L'appareil peut être utilisé dans des conditions d'exposition portables sans restriction.