

Digital Broadcasting Device
(iBeacon/Eddystone)

Model number: BLE-2

Model	Description
36501 LBS-BLE-2AU	Bluetooth beacon - 2-alkaline batteries - not provisioned
36502 LBS-BLE-2AP	Bluetooth beacon - 2-alkaline batteries - fully provisioned
36503 LBS-BLE-2LU	Bluetooth beacon - 2-lithium batteries - not provisioned
36504 LBS-BLE-2LP	Bluetooth beacon - 2-lithium batteries - fully provisioned
36511 LBS-BLE-2AU-8	Bluetooth beacon - 2-alkaline batteries - not provisioned (8-Pack)
36512 LBS-BLE-2AP-8	Bluetooth beacon - 2-alkaline batteries - fully provisioned (8-Pack)
36513 LBS-BLE-2LU-8	Bluetooth beacon - 2-lithium batteries - not provisioned (8-Pack)
36514 LBS-BLE-2LP-8	Bluetooth beacon - 2-lithium batteries - fully provisioned (8-Pack)

The robust MiniBeacon BLE-2 is an enterprise-level iBeacon with ARM core chipset nRF51822 and leverage BLE

4.0 technology; it has a strong & waterproof case, 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
- Powered by 2pcs AA batteries, alkaline
- Omni-directional PCB antenna
- The max. 200 meters advertising distance
- Waterproof IP65
- Ultra-low power consumption chipset nRF51822 with ARM core



i3 Robust MiniBeacon
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™ standard;
- Compatible with all Bluetooth 4.0 (BLE) devices;

Long Battery Lifetime and Battery Level

- 5 years, with the default settings;
- LED will be flashing when battery low;
- Easy to get the real-time battery level notification;

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 200 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

Mounting

- 3M branded adhesive for direct mounting to wall;
- Bracket for mounting on non-metal wall by two-screw holds;

BATTERY ASSEMBLY

- Please prepare at least 2pcs AA size alkaline batteries;
- **Please do check the polarity of batteries and battery-socket before assembly, see image 2;**
- Please assembly the batteries as the below image 3;
- MiniBeacon will be turned on automatically if batteries were assembly correctly;



Image 2



Image 3

LOW BATTERY INDICATION

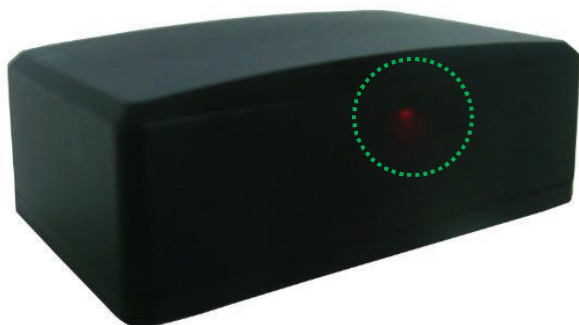


Image 4

- If the battery level lower to 2.3V, the Red LED will flash a time every 5 seconds; MiniBeacon will stop broadcasting automatically once the battery level lower to 2.1 volts. (Image 4)

- We don't provide any batteries for i3 samples, because the heavy of batteries will substantially increase the shipment.

TECHNICAL SUPPORT

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

CONFIGURABLE PARAMETERS

Characteristic	Item	Default Settings
0xFFFF1	UUID	E2C56DB5-DFFB-48D2-B060-D0F5A71096E0 (Proximity)
0xFFFF2	Major	0
0xFFFF3	Minor	0
0xFFFF4	Measured Power	-59 (0xC5)
0xFFFF5	Transmission Power	6 (0dBm)
0xFFFF6	Change Password	minew123 (Must be 8 characters)
0xFFFF7	Broadcasting Interval	5(500mS)
0xFFFF8	Serial ID	Random (Unique serial ID for beacon)
0xFFFF9	iBeacon Name	MiniBeacon_ (the maximum 14 characters)
0xFFFFE	Connection Mode	0 (connectable, configuration mode)
0xFFFFF	Soft Reboot	minew123 (it is same as the value of Change Password)

ELECTRONIC PARAMETERS

Item	Value	Remarks
Case Color	Black, white	Other colors can be customized
Battery Model	2 x AA (LR6)	2pcs Alkaline battery, 2500mAh, 3.0V
Operation Voltage	1.8-3.6V	DC
Transmission Circuit	10.5mA (Max.)	Tested at 0dBm transmission power
Transmission Range	200 meters	Maximum
Antenna	50ohm	On board / PCB Antenna
Accessories	Double adhesive	1pc, high-strength, 3M brand;
	Screws	2pcs screws and 2pcs plastic holders
Net Weight	50.0g	Without battery and package box
Size	72 x 45 x 22MM	Null

PACKING INFORMATION

Gift package:

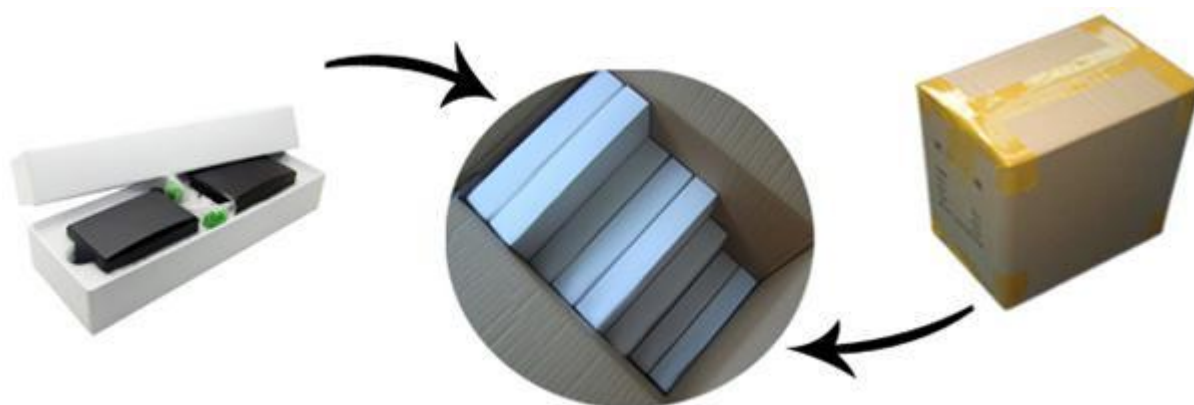


Image 6

Standard package:



Image 7

Details	Min. Package		Carton	
	Gift	Standard	Gift	Standard
Quantity	2pcs / pack	8pcs /box	80pcs/carton	
Net Weight	100.0g/ pack	400.0g/ box	4.2Kg/carton	
Gross Weight	220.0g/ pack	420.0g/ box	9.5Kg	6.0Kg
Size	21.5 x 7.7x 3.5 CM	32 x 11 x 8 CM	32 x 23 x 40 CM	

APPENDIX

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 WARNING

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.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum 20cm distance between the radiator your body: Use only the supplied antenna.