MINEW

Datasheet

Ultra-Long Range Beacon

Model: MBM01

Version: 001

BRIEF INTRODUCTION

MBM01 with simple and stylish design is a Bluetooth location beacon dedicated to positioning and marketing. It has ultra-long broadcast distance, super long battery life and high protection level. Supporting BLE 5.0 technology, it can quickly locate personnel through indoor positioning technology and push marketing information in real time. In addition, the broadcast distance can reach up to 1509ft(460m) and above, it can be reasonably deployed in public places such as airports and railway stations to manage the human traffic and respond to emergency happening by cooperating with the BLE gateway.

KEY FEATURS

BLE 5.0 & nRF52 Series

Up to 10 years Service Lifetime

Up to 1509ft(460m) Broadcasting Distance

IP67 Waterproof & Dustproof

Compatible with 1Mbps / 125Kbps

External Operation Button

APPLICATION SENARIOS

Shopping Habits Analysis & Precision Marketing

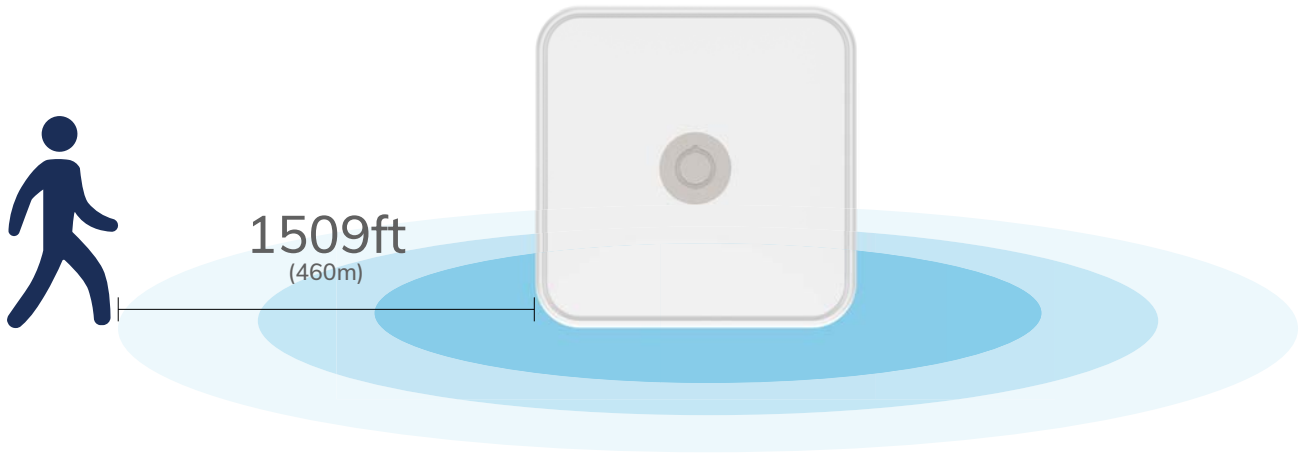
Based on the Bluetooth positioning technology and relative software development, users can collect data of customer shopping habits & behaviors for precision marketing. Also, the collected data can help users to adjust the commodity category or display to improve the economic profits.

Information Pushing & Indoor Navigation

Through the reasonable installation of MBM01 in airports, helping passengers save time to find the right boarding gate or proximity shops. Likewise, the admins can push information, such as flight or promotion information, to the user's mobile phone for message notification and proximity marketing.

Medical Consultation Tracking & Safety Responding

In a general hospital, based on the indoor positioning technology and relative software development, the admin can collect data of daily medical consultation for the reasonable arrangement of medical resources. Also, through the reasonable installation of MBM01 in hospitals, the admin can locate every safe-guard's positions for fast responding once emergency happening.



DEVICE SPECIFICATIONS

BASIC PARAMETERS		
Material	Plastic PC+ABS	Null
Color	White	Null
Dimensions（L*W*H）	72*72*23mm	Null
Protection	IP67	Null
Net Weight	129g / 153.4g	Lithium/Alkaline Battery Included
Battery	Lithium / Alkaline Battery	Total capacity: 10800mAh / 5800mAh
Battery Lifetime	6 years (125Kbps) / 10 years (1Mbps)	Default setting: 8dBm, 900ms
Chip Model	nRF52 series	Null
Bluetooth Standard	BLE 5.0	Null
Bluetooth Protocol	iBeacon & Eddystone	Null
Configuration App	BeaconSET +	Null
Sensors	No	Accelerator Optional
OTA	Yes	Null
NFC	No	Null
LED	Yes	Red/Green/Blue Light
Operating Temperature	-20℃~65℃ / -18~50℃	Lithium/Alkaline Battery

DEFAULT BROADCASTING PARAMETERS(BEACONPLUS FIRMWARE)

iBeacon (On)	UUID(16bytes)	MBM01C56DB5-DFFB-48D2-B060-D0F5A71096E0
	Major(2bytes)	0
	Minor(2bytes)	0
	Measured power	-59dBm(0xC5)
	Tx power	8dBm
	Interval(ms)	900ms
UID (Off)	Instance ID	Random
	Namespace ID	Random
	Measured power	-24dBm(0xE8)
	Tx power	8dBm
	Interval(ms)	900ms
URL (Off)	URL	http://www.minew.com/
	Measured power	-24dBm(0xE8)
	Tx power	0dBm
	Interval(ms)	2000ms
TLM (Off)	Electricity mV	By default
	PDU packets	By default
	Boot-time	By default
	Measured power	-24dBm(0xE8)
	Tx power	0dBm
	Interval(ms)	4000ms
INFO (Off)	Device Name	MBM01
	Electricity	By default
	MAC Address	Factory setting
	Measured power	-24dBm(0xE8)
	Tx power	-8dBm
	Interval(ms)	4000ms
Extra Function	Password	minew123(configurable)
	Connectable	Yes(it is configuration mode)
	Reset factory	available
	Update firmware	available

COMPATIBILITY

SYSTEMS SUPPORT	VERSION SUPPORT
iOS 10.0 and above(1mbps)	iPhone 5/5C/5S, iPhone 6/6Plus/6S/6S Plus,iPhone 7/7Plus, iPhone 8/8Plus/ iPhone x/xr/xs/xs max, iPhone SE/SMBM01, iPhone 11/11 pro/11 pro max...
Android 4.3 and above(1mbps)	SAMSUNG, MIUI, HUAWEI, ONEPLUS, VIVO, OPPO,etc.

* **Remark:** iOS system cannot receive 125Kbps but 1Mbps currently. Android system can receive both 1Mbps and 125Kbps, but the mobile devices should be compatible with BLE 5.0 & Android 8.0 and above. More details please contact our sales team.

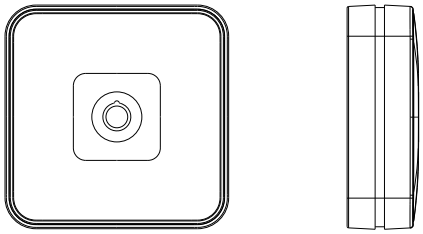
PRODUCT APPEARANCE

INSTALLATIONS

Methods: Double-side adhesive tape & Screw bracket installation

Double-side adhesive notes:

* Recommended Installation Environment: The material surface should be Aluminum, galvanized steel, enamel steel, stainless steel, ceramic, glass/epoxy resin, acrylic, PBT, ABS, PC, hard
* PVC, etc.
* Best Temperature: 21 ~ 38°C, use in a low-temperature.
  Requirements: No dust on the material surface and clean it before installation. Before pasting, increasing the viscosity with a hairdryer, or sticking it over half-hours at a reasonable temperature and then pressing for seconds and repeat for better stability.



The arrow of button pointing up is the direction of the antenna, please install the device as the picture shown for better broadcast signal.

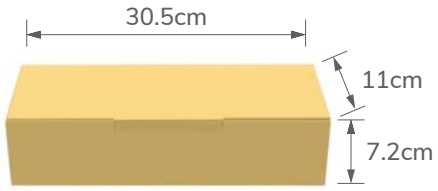
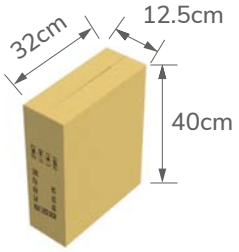
Screw bracket notes:

* Recommended Installation Environment: Screws installation should be on a hard surface, such as a wall where is not loose.
* Temperature Range: same with the operating temperature.
* Detail Steps:
  1. Put the MBM01 into the installation bracket.
  2. Drill screw holes on the surface of a hard surface to be installed.
  3. Put the green expansion plug into the screw holes on the hard surface to be installed.
  4. Put the screws into the green expansion plug, and install the product in the direction of screw holes.

CAUTIONS

* Press and hold button for 3.6s until the blue light shine for 3s to turn it on; turn it off through the “shut-down” button on the BeaconSET+ APP, and the blue light will flash 5 times.
* The blue light flashes 2 times when BeaconSET+ connects the devices successfully; flashes 3 times to show the disconnection with BeaconSET+ APP.
* Click the button to re-enter into the configurable page to connect the device after the unconnectable mode.
* Decreasing the power and increasing the broadcasting interval can extend the lifetime of BLE beacons if it is used in a proper environment.
* The device will be shut-down for shipping.
* Please use the device on the suggested working temperature for safety.
* Minew will not be responsible for the damage caused by disassembling the product.

PRODUCT PACKAGE

Items	Inner Box(Battery included)	Outer Box(Battery included)
Package Picture		
Quantity	8 Pcs / box	40 Pcs / box
Dimensions	30.5 x 11 x 7.2 cm	32 x 12.5 x 40 cm

CERTIFICATIONS

CE Regulation
FCC Regulation

FCC REQUIREMENT

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

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.
2. this device must accept any interference received, including interference that may cause undesired operation.

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 residentialinstallation. 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 interferencewill 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 towhich 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

QUALITY ASSURANCE

The factory has already obtained the certification of ISO9001 Quality System. Each product has been strictly tested (testings include transmission power, sensitivity, power consumption, stability, aging, etc.).
Warranty Period: 12 months from the date of shipping (Battery and other accessories excluded).

DECLARATION

Rights Statement

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Disclaimer

Minew team reserves the right to the final explanation of the document and product differences. The Minew group is not responsible for liability of property or personal injury with the wrong operation if users develop related products without checking the technical specifications of this manual.

SHENZHEN MINEW TECHNOLOGIES CO., LTD.

+86 (755) 2103 8160

www.minew.com

info@minew.com

www.minewstore.com

No.8, Qinglong Road, Longhua District, Shenzhen, China