

| Product Name | GAOTek Ultra Long Range I beacon Locator |
|--------------|---|
| Product SKU | GAOTek-IIT-161 |
| Product URL | https://gaotek.com/product/gaotek-ultra-long- range-ibeacon-locator/ |

Contact us: sales@gaotek.com



Contents

| 1 BRIEF INTRODUCTION | 3 |
|---|----|
| 2 KEY FEATURES | 3 |
| 3 APPLICATION SCENARIOS | |
| 4 Information Pushing & Indoor Navigation | 4 |
| 5 Medical Consultation Tracking & Safety Responding | 5 |
| 6 DEVICE SPECIFICATIONS | 5 |
| 7 TYPICAL CONFIGURATIONS VS BATTERY LIFE | 6 |
| 8 COMPATIBILITIES | 8 |
| 9 PRODUCT APPEARANCE | 8 |
| 10 INSTALLATIONS | 9 |
| 10.2 Double-side adhesive notes | 9 |
| 10.3 Screw bracket notes | 10 |
| 10.4 Detail Steps | 10 |
| 11 CAUTIONS | 10 |
| 12 PRODUCT PACKAGE | 10 |
| 13 QUALITY ASSURANCE | 11 |
| 14 DECLARATIONS | 11 |
| 14.1 Rights Statement | 11 |
| 14.2 Disclaimer | 11 |



GAOTek Ultra Long Range I beacon Locator

1 BRIEF INTRODUCTION

MBM01, equipped with the ultra-low power nRF52833 chip supporting multiprotocol SoC with Bluetooth 5.1 direction finding radio, is a Bluetooth location beacon dedicated to positioning and marketing. The broadcast distance can reach up to 1968 ft (600 m) or more on 125 Kbps setting, which can be reasonably deployed in public places such as airports and railway stations to manage the human traffic, respond to emergency happening, and push marketing information by cooperating with the BLE gateway.

2 KEY FEATURES

Up to 1968ft(600m) Broadcasting Distance



Compatible with 1Mbps/125Kbps



IP67 Waterproof & Dustproof



External Operation Button





BLE 5.1 & nRF52833 (nRF52840 Optional)



Up to 10 years Service Lifetime

3 APPLICATION SCENARIOS

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.



4 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.





5 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 position for fast responding once emergency happening.



6 DEVICE SPECIFICATIONS





| 02 | | Version: 001 |
|--------------------|----------------------------------|-------------------------------------|
| 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 | nRF52833 | nRF52840 Optional |
| Bluetooth Protocol | iBeacon & Eddystone & Senor Data | Null |
| Configuration App | BeaconSET + | Null |
| Sensors | No | Accelerator Optional |
| OTA | Yes | Null |
| NFC | No | Null |

LED

Remark: *Customization can be provided including button color, etc.

7 TYPICAL CONFIGURATIONS VS BATTERY LIFE

Remark: Battery lifetime calculating above only can be a reference. Users can extend the lifetime by configuring the broadcast parameters reasonably in realistic applications.

Battery Type Data Rate Transmit Power Broadcast Battery



| | | | Interval | Lifetim e |
|--|---------|------|----------|-----------|
| Lithium Battery (10800mAh) 125Kbps 1Mbps | 125Kbps | | 900ms | 6 years |
| | 1Mbps | | | 10 years |
| A Ilzalina | 125Kbps | 8dBm | | 3 years |
| Alkaline Battery (5800mAh) | | | | 10 years |

| | UUID (16bytes) | E2C56DB5-DFFB-48D2-B060- D0F5A71096E0 |
|---------|-----------------|--|
| | Major (2 bytes) | 0 |
| iBeacon | Minor (2 bytes) | 0 |
| (On) | Measured power | -59 dBm (0xC5) |
| | Tx power | 8 dBm |
| | Interval (ms) | 900 ms |
| | Instance ID | Random |

| ~ ~ | | | |
|-----------|----|-------|---|
| Namespace | H) | Rando | m |

UID

Measured power - 24 dBm (0xE8)

(Off)

Tx power 8dBm

Interval(ms) 900ms

| URL (Off) | URL Measured power Tx power | http://www.minew.com/ -24dBm(0xE8) 0dBm |
|--------------|-----------------------------------|---|
| | Interval(ms) | 2000ms |
| | Electricity mV | By default, |
| | PDU packets | By default, |
| TLM | Boot-time | By default, |
| (Off) | Measured power | -24dBm (0xE8) |
| | Tx power | 0dBm |
| | Interval(ms) | 4000ms |



| | Device Name | MBM01 |
|----------|-----------------|--------------------------------|
| | Electricity | By default, |
| INFO | MAC Address | Factory setting |
| (Off) | Measured power | -24 dBm (0xE8) |
| | Tx power | -8 dBm |
| | Interval(ms) | 4000 ms |
| | Password | minew123(configurable) |
| Extra | Connectable | Yes (it is configuration mode) |
| Function | Reset factory | available |
| | Update firmware | available |

8 COMPATIBILITIES

SYSTEMS SUPPORT

iOS 10.0 and above (1Mbps)

Android 4.3 and above(1Mbps)

VERSION SUPPORT

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...

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.

9 PRODUCT APPEARANCE

CERTIFICATIONS

CE Regulation



FCC Regulation



10 INSTALLATIONS

10.1 Methods: Double-side adhesive tape & Screw bracket installation

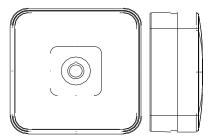
10.2 Double-side adhesive notes

10.2.1 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.

10.2.2 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.





10.3 Screw bracket notes

10.3.1 Recommended Installation Environment: Screws installation should be on a hard surface, such as a wall where is not loose.

10.4 Detail Steps

- > Put the MBM01 into the installation bracket.
- > Drill screw holes on the surface of a hard surface to be installed.
- > Put the green expansion plug into the screw holes on the hard surface to be installed.
- > Put the screws into the green expansion plug, and install the product in the direction of screw holes.

11 CAUTIONS

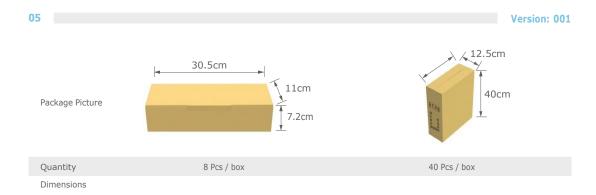
Press and hold button for 3.6s until the blue light shine for 3s to turn it on; turn it off through the "shut-down" button on the Beacon SET+ APP, and the blue light will flash 5 times. The blue light flashes 2 times when Beacon SET+ connects the devices successfully; flashes 3 times to show the disconnect- Tion with Beacon SET+ 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. Mine will not be responsible for the damage caused by disassembling the product.

12 PRODUCT PACKAGE



Items Inner Box (Battery included) Outer Box (Battery included)



13 QUALITY ASSURANCE

The factory has already obtained the certification of ISO9001 Quality System. Each product has been strictly tested (testing's). include transmission power, sensitivity, power consumption, stability, aging, etc.).

13.1 Warranty Period: 12 months from the date of shipping (Battery and other accessories excluded).

14 DECLARATIONS

14.1 Rights Statement

The contents of this manual belong to the Manufacturer of Mine Technologies Co., LTD, Shenzhen, and protected by Chinese laws and applicable international conventions related to copyright laws. The contents can be revised by the company accord- Ing to the technological development without prior notice. Anyone, companies, or organizations cannot modify the contents and cite the contents of this manual without Minow's permission, otherwise, Violators will be held accountable according to law.

14.2 Disclaimer



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

