

## **Product Introduction**

MBM03 is a rugged Bluetooth® road stud beacon developed by Minew. The product is equipped with a low-power high-performance Bluetooth chip and a large-capacity battery, and the product has a service life of 10 years or more under low-power broadcast. It has a tough build inside-out to withstand strict requirements of high pressure and rigged protection, which makes it ideal for maintenance-free outdoor parking scenarios such as hospitals, parks, chemical plants, and shared electric vehicles.

## **Features**

- \*IK10 Impact Protection
- \*Load Pressure Test 6 Ton
- \*10 Years or more Lifetime
- \*IP68 Dust & Waterproof
- \*75 m Broadcast Distance (Open area)



## **Application Scenarios**

### **Smart Parking**

Install MBM03 in the parking lot area, combined with the relevant cloud platform, the administrator can collect daily parking vehicle information and detect parking space usage through interactive beacons, so as to realize the parking lot digital management such as parking space entry and exit and resource optimization.

## Route Navigation

Based on certain algorithms, platforms, and terminal devices, route planning applications for end users in shopping malls, hospitals, offices, and other places can be attained. Before the driver arrives at the parking lot, the driver can use the mobile device or in-vehicle device to guide the direction or know which area has free parking space, thus improving the efficiency of finding a parking space. On the contrary, in a large parking lot, the car owner can open the digital map through the mobile device to quickly locate the parked vehicle.

## Shared Vehicle Parking Management

By deploying MBM03 road studs in the parking area of shared vehicles, it communicates with on vehicle smart lock Bluetooth chip to assist in parking, making sure that all vehicles are parked in allowed areas and no disruptive parking behavior occurs. In addition, for the ride-sharing business, the parking status of designated areas can be traced more accurately, thereby improving management efficiency and reducing maintenance costs.

## Product Specifications

Basic Parameters		
Model	MBM03	/
Material	PC	/

**MBM03 Rugged Road Stud Beacon**

Color	Yellow/Black	Customizable
Dimensions (L*W*H mm)	115×100×29 mm	/
Weight	169.1 g	/
Protection	IP68/IK10	/
Default Application	BeaconSET+	Relevant SDK provided

**Technical Parameters**

Chip	nRF52 Series	/
Sensor	No	/
Battery	Lithium Battery	4000mAh
Batter Lifetime	10 Years or more	By default settings
Operating Temperature Range	-40~85°C	/
Operating Humidity Range	0~95%RH	No condensation
Led	No	/
Default Broadcast Setting	0 dBm, 900 ms/ -4 dBm, 4000 ms	iBeacon & INFO Frame
Supported Devices	iOS 10.0 and	iPhone6/6Plus/6S/6SPlus,



## MBM03 Rugged Road Stud Beacon

	above	iPhone7/7Plus,iPhone8/8Plu,iPhone x/xr/xs/xs max, iPhone SE/SE2, iPhone 11/11 pro/11 pro max
	Android 4.3 and above	Samsung, Xiaomi, Huawei, Honor, OnePlus, Google pixel.

### Device Operation

Switch-on: Switch on the shipment

Switch-off: No shutdown function

Default Application Operation:

- ①Open the BeaconSET+ application.
- ②Find the Mac address related to the product.
- ③Input the password "minew123" and confirm to the default setting page.

### Installation Instruction

#### Screw Option

- According to the deployment needs, the road surface of the installation location should be cleaned, try to stay away from the low-lying road surface that is prone to water accumulation, and try to avoid the location where the wheels or other obstacles are easy to roll over for deployment).



\*The MBM03 beacon is a Bluetooth<sup>®</sup> beacon rather than a real road stud. In order to ensure the device performance, please deploy it in the recommended way above as much as possible to prevent the equipment from being repeatedly rolled by vehicles often. Also, considering different users has different scenarios, please contact our sales team if you have any questions about deployment.

- Prepare the installation positioning mark, use a suitable impact drill to drill holes on the surface to be installed, place the expansion plug first, and then use the stainless steel screws in the accessories to lock and fix the equipment.

## Certifications

CE FCC

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, and
- (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 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 distance between 20cm the radiat

or your body: Use only the supplied antenna.

## **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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personal injury with the wrong operation if users develop related products without checking the technical specifications of this manual.

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