

## Cover Page

Datasheet

**Product Name :** Dynamic Tag



## Contents :

### Product Overview

MWB01 is a Bluetooth® LE tag for personnel location and management. It supports multiple wearing styles and has a built-in acceleration sensor for smart power saving. Combined with algorithms, MWB01 can get the wearer's location indoors, which is suitable for children's amusement parks, aquariums, resorts and other places to effectively prevent children from getting lost. In addition, MWB01 can be used for ticket underwriting and sensorless consumption by NFC.

### Key Features

- Unique slim design
- IP67 dust & water resistance
- Replaceable battery
- Sensitive NFC
- Customised accessories , flexible wearing

### Market Applications

#### Personnel management

Combined with Bluetooth gateways, MWB01 provides superior indoor people location and trajectory analysis for amusement facilities such as resorts, to ensure visitors' play experience and the efficient operation of the venue. By analyzing visitors' movement trajectories, managers can optimize the location and arrangement of amusement facilities to help them better plan and operate.

#### Ticket verification

MWB01 provides an efficient and convenient solution for ticket verification and sensorless consumption by NFC. Also, it can reduce queuing time and improve entry efficiency. Combined with the software, it can also record the time of entry to help you better understand the entry situation, as well as to prevent illegal entry and improve the

security of the venue.

## Product Specifications

### Basic Specifications

Body material	ABS
Color	White
Size (D * H)	Φ31.05 * 9.2 mm
Weight	6.7 g ( without accessories )
Resistant level	IP67
Battery	1 pcCR battery, 220 mAh
Battery life	8 months ( Default configuration, withpower saving )
Sensor	Accelerometer
Button	/
LED	1 green light
NFC	Supported
OTA	Supported
Configuration App	BeaconSET+ <sup>[1]</sup>

[1] Bluetooth related SDKs are available, please contact our sales team for details.

### Technical Specifications

Chip	nRF52series
Bluetooth version	Bluetooth® LE 5.0
Broadcast power	-40dBm ~+4dBm
Broadcast frequency	100ms ~ 5s
Broadcast distance	Up to80m(open area)
Working temperature	-20℃~60℃
Security	Password verification to change settings, restart, non-connectable mode, malicious connecting proof supported

### Broadcast Specifications

Type (channel)	Items	Default settings
iBeacon (on)	UUID (16 bytes)	E2C56DB5-DFFB-48D2-B060-D0F5A71096E0 (configurable)
	Major (2 bytes)	0 (0 – 65535, configurable)
	Minor (2 bytes)	0 (0 - 65535,configurable)
	Measured power	-59 dBm (0xC5)@1 m
	Tx power	0 dBm

	Interval	900 ms ( 4000ms with power saving)
UID (off)	Instance ID	00112233445566778899(configurable)
	Namespace ID	Random
	Measured power	-24 dBm (0xE8) @0 m
	Tx power	0 dBm
	Interval	2000 ms
URL (off)	URL	https://www.minew.com/ (configurable )
	Measured power	-24 dBm (0xE8) @0 m
	Tx power	0 dBm
	Interval	2000 ms
TLM (off)	Electricity mV	System built-in
	Boot up time	System built-in
	PDU packets	System built-in
	Tx power	0 dBm
	Interval	4000 ms
INFO (on)	Device name	MWB01
	Battery level	System built-in
	MAC address	Assigned at factory
	Tx power	-4 dBm
	Interval	4000 ms
ACC  (on)	Tx power	0 dBm
	Interval	4000 ms (no broadcasting at rest )
Password	Password	minew123 (default)
Connectable mode	Connectable or not	Connectable

### Compatibilities

Supported systems	Supported models
iOS 10.0 and above	iPhone6 /6 Plus /6S/ 6S Plus /7 /7 Plus /8 /8 Plus /x /xr /xs /xs max /SE /SE2 /11 /11 pro /11 pro max
Android 4.3 and above	LG, Samsung, Xiaomi, Huawei, Honor, OnePlus, Google Pixel, etc

## Instruction

### Boot

Hold the magnet close to the side of the power-on icon for 3s, and the green light will be on for 3s.

### Shutdown

When on, you only can turn it off by the BeaconSET+ App. The green light flashes 5 times means that it has been powered off.

### Battery level

When the battery is low, the green light flashes once every 10s.

### App connection and disconnection

When connected the green light will flash twice. When disconnected, the green light will flash 3 times.

### Connectable mode

MWB01 defaults to connectable mode and can be set to non-connectable mode after connecting the App. MWB01 can return to connectable mode after re-powering in non-connectable mode.

### Assembly method

Align the position of the upper and lower shells, and press and close the upper and lower shells from the buckle position, then one round of pressing.

## Precautions

1. The sensing distance of NFC is different due to the surrounding environment, card reader model, etc.
2. There is no wearable accessories by default, if you need to consult our sales team.
3. The use time and broadcast distance fluctuate due to the environment, and the specific time is subject to the actual use.
4. The product can only be immersed in water for a short time and does not support use underwater for a long time.
5. Do not use the product above the designed working temperature to avoid damage. It is recommended that store the product under -20°C to 40°C when not in use.
6. Avoid being exposed to direct sunlight for an extended period to mitigate shell aging.
7. Minew will not be responsible for any damage resulting from disassembling manually.



## Certifications



Note: CE, FCC and SRRC certification numbers can be provided upon request. If other certifications are needed, please contact our sales team.

## Packaging information

Details	Inner carton	External box
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Pictures		
Quantities	60 pcs	600 pcs
Sizes	30.5 x 11 x 7.2 cm	32 x 23.5 x 40 cm

### Quality Assurance

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

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

### Declaration

#### Statement of Rights:

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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.

#### FCC warning:

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.

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.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

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

### Contact Information

#### **SHENZHEN MINEW TECHNOLOGIES CO., LTD.**



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