Anti-Tamper Asset Tag

Datasheet

Model: MBT01
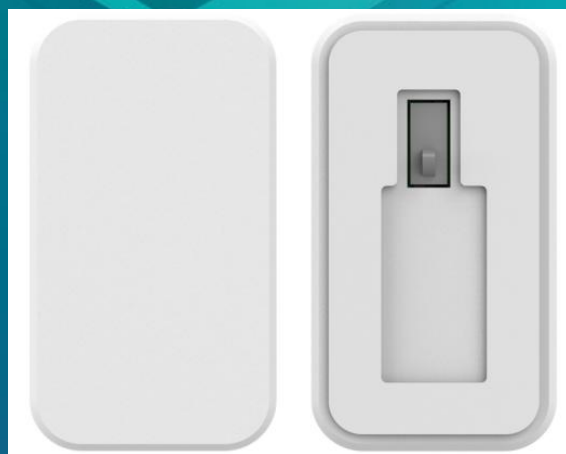
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1. Brief Introduction

MBT01 with a anti-tamper button is a Bluetooth location tag dedicated to asset positioning. If the tag is forcibly removed, it will broadcast a specific signal to the server and administrator that the asset tag has been removed to ensure the safety of the asset. The broadcast distance can reach up to 656ft(200m) on default setting, which can track the assets of warehouse to ensure fast-searching and status of assets. Likewise, the device can be deployed on some sickbed or equipment in hospital due to its portable design for better medical resources application and management.
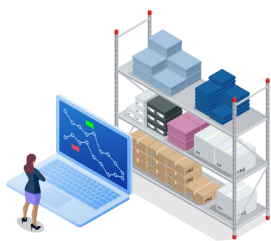
2. Key Features

BLE 5.0 & nRF52 Series
Anti-Tamper Alarm Detection
Up to 3 years Service Lifetime
Up to 656ft(200m) Broadcasting Distance
IP65 Waterproof & Dustproof
Portable & Fashionable Design

3. Market Applications

Smart Warehouse
Smart Logistic
Smart Office

Application Scenarios

Asset Tracking & Resources Allocation

Based on relevant technology, through MBT01 installed on important assets, users can achieve indoor positioning so that save amounts of time on searching. Also, the admins can track the assets' security status with the anti-tamper button of the device.

Item Transportation&Anti-lost Tracking

Based on user's technology development on the tracking system, they can track items status by end-to-end during the transportation. Besides, through MBT01 installed on different delivery sites, users can take solutions to transport delay or anti-lost by tracking the items' status in real-time.

4. Device Specifications

Basic Parameters

Item	Value	Remarks
Material	ABS	Null
Color	White	Null
Dimensions（L*W*H）	42.5*23.5*5.3mm	Null
Protection	IP65	Null
Battery	CR Button Series	230 mAh
Battery Lifetime	3 years	Default Setting: 0dBm, 5000ms
Chip Model	nRF52 Series	Null
Configuration App	BeaconSET +	Null
Sensors	No	Null
OTA	No	Null
NFC	No	Null
LED	Yes	Blue Light
Operating Temperature	-20℃~60℃	Null

Broadcast Parameters(BeaconPlus Firmware)

Broadcast Frame	Status	Item	Default Setting
Tamper	Normal Broadcast	Transmit Power	0dBm
		Broadcast Interval	5000ms
	Anti-tamper Alarm Broadcast	Transmit Power	0dBm
		Broadcast Interval	1000ms
		Broadcast Duration	30000ms

Remark: Currently MBT01 only opens the Tamper channel, which can normally show two different broadcast status: Normal Broadcast or Anti-tamper Alarm Broadcast, and the battery level information.

5. Product Appearance

6. Installations

Methods: Double-side adhesive tape

Details:

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.

● **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.

7. Cautions

- Press button for 3 times sequentially until the blue light shines to turn it on. Turned-off by the shut-down button on the BeaconSET+ APP until the blue light shines times.
- Please do not disassemble the device often so that affect the performance of the anti-tamper button.
- Decreasing the power and increasing the broadcasting interval can extend the lifetime of BLE tags 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.

8. 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.
The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction

9. 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).

10. DECLARATION

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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.

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