



MTB02

Paper Asset Tag

Datasheet



PRODUCT OVERVIEW

Paper Asset Tag built in cost-effective hardware and supporting encrypted protocol broadcast is the first general ultral-thin wireless asset tag of Minew. Due to its eco-friendly design, the tag can be used in many scenarios such as, warehouse, logistic transportation, retail store, museum, smart office, etc. Solving the problem of process tracking of the passive label in the market.



KEY FEATURES



2.1 mm Ultra-thin Design



50 m Broadcast Transmission Distance



6 Months Battery Life



Cost-effective



Eco-friendly & Portable

APPLICATION SCENARIOS



Warehouse Asset Management

The MTB02 is ultra-thin and cost-effective that is ideal to be deployed on logistic, warehouse and museums' assets. Customers can know the location and stock status of these scenarios along with related technologies, to achieve efficiency management of assets.



Freight Shipment Tracking

MTB02 can be deployed on parcel assets transported by air and road. By cooperating with nearby asset trackers and combining certain algorithms and solution platforms, it can ultimately realize the historical status monitoring and location tracking of assets throughout the logistics and transportation process to avoid asset damage or loss.

Note: Application cases above are only as a reference, more applications realized are based on users' software algorithm ability.

PRODUCT SPECIFICATIONS

BASIC SPECIFICATIONS

Material	Paper
Color	White
Size (L * W * H)	62*53.5*2.1 mm
Weight	4 g (battery included)
Battery capacity	40 mAh
Service life	6 months (default settings)
Sensor	/
LED	/
Button	/
NFC	Yes
Information view app	MSensor

TECHNICAL SPECIFICATIONS

Broadcast power	Options: -20, -16, -11, -7, -3, 0, 3 dBm	Default 0 dBm
Broadcast interval	Default 3000 ms	
Broadcast distance	50 m (open space)	
Recommended Working temperature	-20°C ~ 50°C	
Recommended Storing temperature	20°C ~ 35°C	
Security	Non-connectable mode, data cannot be altered	

BROADCAST SPECIFICATIONS

Type/ channel	Item	Default settings
Label (Activated by default)	Company ID	Minew
	Product ID	MTB02
	Product serial number ID	Factory default
	Battery voltage	Units: mV
	SOC Temperature	Units: °C
	Measured power	-59 dBm
	Tx power	0 dBm
	Interval (ms)	3000 ms

Note:

- * The product only supports 2 broadcast frames, which can be selected from Label, iBeacon, MBeacon INFO, UID, URL, and TLM, and the broadcast power must be consistent.
- * The parameters of the finished product need to be determined at the time of production. Once programmed into the chip, the parameters cannot be modified.
- * Broadcast parameters list above only as a reference, please ask our sales team or technique team for more broadcast detail.

SUPPORT 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, etc.

Android 4.3 and above

LG, Samsung, Xiaomi, Huawei, Honor, OnePlus, Google Pixel, etc.

DEVICE OPERATIONS

Power on

Phone with NFC or 13.56 MHz NFC device can turn the tag on.

Shutdown

Not supported.

Device information viewing

Check the device's information by Msensor App.



Please use nRFconnect or MSensor to check if it is power on successfully.

CAUTIONS

- * After the product is powered on, it will be in broadcast mode and cannot be connected.
- * The finished product does not support burning firmware provided by customers.
- * If the operating temperature is exceeded, there could damage the product.
- * If you want to store the tag for a period of time before using it, please avoid the storage environment around the devices containing NFC function, which may cause the tag to be turned on by mistake, affecting the service life of the tag.
- * To extend the battery life if needed, it is recommended to choose a low broadcast power and a long broadcast interval firmware version at the manufacturing stage.
- * Please avoid direct sunlight for an extended period to avoid aging of the shell when in use.
- * Minew will not be responsible for any damage resulting from disassembling manually.

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.

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.

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.

PACKAGING

Details	Internal carton	External box
Pictures		
Units	175 pcs	1750 pcs
Sizes	30.5 * 11 * 7.2 cm	32 * 23.5 * 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. And it 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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