MINEW

MWC02

Ultra Thin Location Card

Datasheet

PRODUCT OVERVIEW

The MWC02 Ultra Thin Location Card is a dedicated card for personnel security management, containing built-in NFC for access control swiping. It adopts cold-pressing technology, with a thickness of only 1.3mm, and can be directly put into card cases, business card holders and wallets. It is suitable for offices, hospitals, museums and other indoor places.

KEY FEATURES

- 1.3mm ultra-thin size
- IP67 dust & water resistance
- Built-in NFC, support access control
- More than 2 years working life
- Customizable with colors and patterns

APPLICATION SCENARIOS

Visitor Management

MWC02 is compact and easy to carry, pairing it with a visitor ID for personnel traffic statistics. This provides data for area optimization, marketing and promotion, and makes the place smarter and safer. It is widely used in exhibition halls, museums, hospitals and other places.

Staff and Patient Management

MWC02 shows the location of staffs and patients, effectively simplifying communication and reducing search time. When a patient has an emergency, nearby staff would be sent quickly for rescue based on the patient's location and bound medical records. Its built-in NFC gives staffs and patients different access rights by writing different data. This gives patients maximum freedom while ensuring their safety.

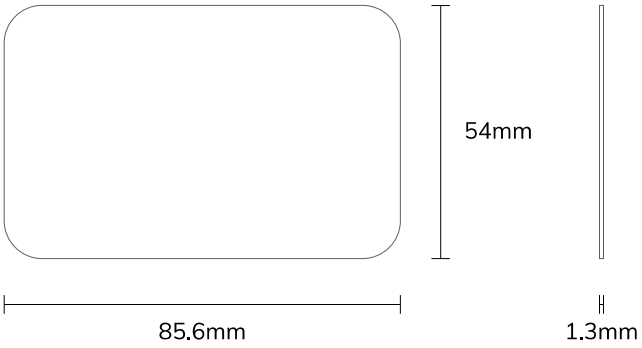
Note: Application cases above are only as a reference, more applications realized are based on users' software algorithm ability.

PRODUCT SPECIFICATIONS

BASIC SPECIFICATIONS

Material	PVC
Color	White, support customized patterns
Size (L * W * H)	85.6*54*1.3 mm
Weight	9.3 g
Battery type	1 pc Li-Mn battery
Battery capacity	400 mAh
Battery life	Approximately 2 years (default settings)
Sensor	Accelerometer
LED	1*RED
Button	No
NFC	Yes
OTA	Not supported
Information view app	BeaconSET or BeaconSET+

Note: BeaconSET or BeaconSET+ can only be used to view the broadcast information, not to connect to the device.



TECHNICAL SPECIFICATIONS

Bluetooth® version	Bluetooth® LE 5.3
Broadcast power	-20, -1, -11, -7, -3, 0, 3 dBm optional,default 0 dBm
Broadcast interval	100 ms～10 s，default 900 ms
Broadcast distance	100 m (open space)
Working temperature	-20℃ ~ 50℃
Storing temperature	20℃ ~ 35℃ (ideal temperature for storing battery)
Security	Non-connectable mode, data cannot be altered

BROADCAST SPECIFICATIONS

Type/ channel	Item	Default settings
iBeacon (Activated by default)	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)
	Tx power	0 dBm
	Interval (ms)	900 ms
MBeacon INFO (Activated by default)	Device name	MWC02
	Battery voltage (mV)	Depends on the status.
	MAC address	Assigned before shipment.
	Measured power	-24 dBm (0xE8)
	Tx power	0 dBm
	Interval (ms)	4000 ms

Note:

①The product only supports 2 broadcast frames, which can be selected from iBeacon, MBeacon INFO, UID, URL, TLM, and Sensor, and the broadcast power must be consistent.

②The parameters of the finished product need to be determined at the time of production. Once programmed into the chip, the parameters cannot be modified.

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

Using an NFC reader, near the NFC location of the card for 2~5s. The red light is on for 3s and then off when it is powered on.

Shut down

Using an NFC reader, near the NFC location of the card for 2~5s. The red light blinks 3 times when it is powered off.

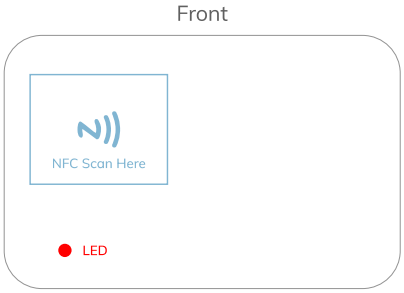
Battery check

The product has no indicator light, and the battery power information can be judged by the voltage information in the MBeacon INFO frame.

Broadcast viewing

Check whether the device is broadcasting by BeaconSET or BeaconSET+ App.

Front



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.
* 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.
* If the operating temperature is exceeded, there could be damage to the product.
* 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.

PACKAGING

Details	Internal carton	External box
Pictures		
Units	120 pcs	1200 pcs
Sizes	30.5 x 11 x 7.2 cm	32 x 23.5 x 40 cm
Gross weight	1315 g	13.55 kg

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:

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

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.

SHENZHEN MINEW TECHNOLOGIES CO., LTD.

+86 (755) 2103 8160
www.minew.com
info@minew.com
www.minewstore.com
No.8, Qinglong Road, Longhua District, Shenzhen, China

FCC WARNING

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