

# M2

## Product Brief



M2 is mainly used for Assets Tracking, Indoor Navigation, Wayfinding, Proximity Marketing, etc. Its IP67 enclosure ensures robust protection for even the harshest of environments and it can be deployed in factory, warehouse, building and other indoor or outdoor places by its multi installation methods.

### High performance Beacon for assets tracking

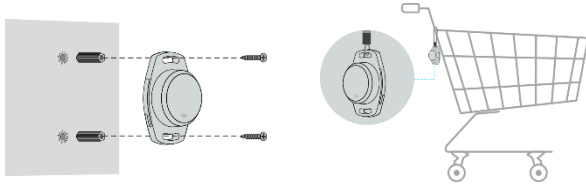
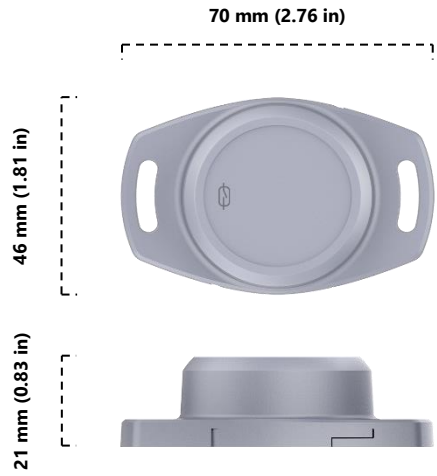
- Long and stable advertising signal make it easy to trace your assets
- Ruggedized design with IP67 waterproof can be used in the harshest indoor and outdoor environments
- Various installation methods make it possible to deploy anywhere

### Smart hardware and software enables M2 to join your solution easily

- Supports Apple iBeacon, Google Eddystone (UID, URL, TLM) and Moko BeaconX Pro Beacon protocols
- Hardware is compatible with Bluetooth 5.1
- Integrated accelerometer and magnetic (Hall-effect sensor) switch sensors
- G-sensor for motion detection can identify whether the Beacon is moving
- Large-capacity and replaceable CR2477 battery ensures up to 5 years lifetime
- Smartphone app (iOS & Android, and provide SDK) easily configure all parameters

### All-round service to save your time and costs to market quickly

- Certified for USA (FCC), Europe (CE) including REACH and RoHS environmental regulation
- All other worldwide certifications can be customized
- Branding, Logo, Label, Packaging, Manufacture parameters, even hardware and firmware are all customizable



General Features	
Main Chip	Nordic nRF52811
Bluetooth	Bluetooth 5.1
Range	Up to 160 meters (in the open area and no obstacles)
Dimension	70mm x 46mm x 21mm
Weight	33.5g (With battery)
Material	ABS+PC
Waterproof	IP67
Color	Grey
Installation	Lanyard, Hang, Sticker, Screw
Button	Inner mechanical button (mounted on PCBA)
LED	Single red led Omnipolar Hall-effect sensor for magnetic switch
Sensor	3-axis accelerometer sensor (optional)
Operational temperature	-20°C / + 60°C
Humidity (non-condensing)	0% ~ 95%

Function	
Advertising	Apple iBeacon Google Eddystone (UID, URL, TLM) MOKO BeaconX Pro sensor data ( with 3-axis Acc sensor)
Multi-advertising	Support up to 6 active slots (Beacon can broadcasts different advertising packets separately)
Power on/off	Press inner mechanical button Magnet approaching to pull-down hall effect sensor
Configuration	Advertising format and data/ Beacon Name Tx Power/ Advertising interval Connection password/ Trigger options/ Sensor parameters
Sensor collection	Broadcast or notify the 3-axis acc data in real time (with 3-axis Acc sensor)
Motion detection	3-axis Acc sensor identify whether the Beacon is moving to change the advertising status and data
Power saving mode	Motion detection stops Beacon broadcasting and make Beacon to sleep
Firmware update	Nordic DFU OTA/ J-link
Configuration APP	BeaconX Pro APP for iOS and Android Open APP SDK for customer to develop

Power	
Power supply	Replaceable 1000mAh lithium coin CR2477 battery
Average current	21uA (1 active slot, 1000ms ADV interval and 0 dBm Tx power, no 3-axis Acc sensor) 28 uA (1 active slot, 1000ms ADV interval and 0 dBm Tx power, motion detection always active)
Lifetime	5 years (no 3-axis Acc sensor) 3.5 years (with 3-axis Acc sensor and motion detection always active)

Service and Customization	
Certification	USA (FCC), Europe (CE-RED, CE-LVD, CE-EMC, REACH, RoHS) Other certifications or approvals can be customized
Manufacture customization	MP Pre- configuration parameters Package/ Laser logo/ Label
Development	Custom firmware development Customer firmware programing Custom hardware design and layout



## FCC STATEMENT

1.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.

(2) This device must accept any interference received, including interference that may cause undesired operation.

2. 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.

FCC Radiation Exposure Statement This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance 5mm between the radiator & your body.

# Contact Us

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