



JM-BL11

LTE Cat M1/NB2 GNSS Sharing Bike Lock

The JM-BL11 GPS bike sharing lock is an optimized hardware for bike sharing solution powered by Cat M1/NB2 low power consumption technology, reinforced structure, and enhanced data security protection, enabling faster projects implementation and easier bike maintenance, as well as better user experience.



Bicycle Retail and Manufacturing



Bike Rental Services



Sports and Fitness



GPS & LBS Positioning

A synergy of multiple positioning systems ensures that locations are accurately displayed on the cloud platform.



Quick & Simple Unlocking

You can unlock this device via Bluetooth, NFC or by scanning QR code on a designated app.



Solar Powered

A solar panel converts sunlight into electricity that can be used to power this device.



Large 12,000mAh Battery

High capacity along with solar-powered energy ensures the electricity never drains out.



Rugged and Durable Design

Rugged case and reliable fixing make it hard to damage this device without professional tools.



IP66 Dust and Water Resistance

Rugged design ensures continued optimal performance, even in the toughest conditions.



Vibrating Alert

You'll get notified if the vibration reaches threshold, such as drilling, hammering, or stealing bike.



TLS Data Encryption

Most widely deployed security protocol between two communicating applications.

Standard Configuration

Positioning & Location

| | |
|-------------------------|------------------------------------------------|
| Technology | GPS, BDS, LBS |
| Accuracy | <2.5m CEP |
| Tracking sensitivity | -165dBm |
| Acquisition sensitivity | -148dBm |
| TTF (open sky) | Avg. hot start < 1sec; Avg. cold start < 40sec |

Cellular

| | |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Technology | LTE Cat M1 & NB2 |
| Frequency | Cat M1: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/ B20/B25/B26/B27/B28/B66/B85 Cat NB2: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/ B20/B66/B85 |

Power

| | |
|---------------|----------------------------------------------------------------------|
| Battery | 12,000mAh/3.6V industrial-grade Li-polymer battery (rechargeable) |
| Solar power | 6V/5W (under solar illumination) Recycling mode |
| Working modes | Timing mode Tracking mode (optional) |
| Battery life | 10 to 60 days with solar panel |

Operating environment

| | |
|-----------------------|---------------------------|
| Operating temperature | -20°C to +60°C |
| Operating humidity | 5% to 95%, non-condensing |
| IP rating | IP66 |

Interface

| | |
|-------------------|-----------------------|
| LED indication | Status (Green/Red) |
| SIM | Nano-SIM |
| Memory capacity | 1000 GPS data entries |
| Tamper proof | Accelerometer |
| USB | N/A |
| GNSS antenna | Internal |
| Bluetooth antenna | Internal |

Feature

| | |
|------------------------|-------------------------------------------------------------------------------------|
| Voice monitoring range | N/A |
| Sensors | Accelerometer, Buzzer, Motor, NTC Audible recovery, Low battery alert, Vibrating |
| Scenarios | Alert, Geo-fence entry & exit alert (optional), Fall detection (optional) |
| Bluetooth | BLE 4.2 |
| NFC | RFID 13.56 MHz |
| Mount method | Rear wheel |
| Configuration support | APP, Tracksolid Pro, PC Tools, SMS |
| Certification | CE, RoHS |

Physical specification

| | |
|------------|-------------------------|
| Dimensions | 142.5 x 223.7 x 38.0 mm |
| Weight | 1180g |

Standard Packing

| | |
|-----------------|---|
| JM-BL11 unit | 1 |
| Solar panel | 1 |
| Extension cable | 1 |

Optional Configuration*

IC Card

Charging cable

Configuration cable

*Optional Configuration required to be customized or purchased separately.