BeMini B3-MIOT-NA
User Manual

BEWHERE

BeWhere BeMini (B3-MIOT-NA) is a small form factor asset tracker that utilizes the latest in LTE-M/NB Cellular technology. It has a very low power consumption and long battery life so you can track, monitor and manage a wide variety of durable and perishable assets like never before.

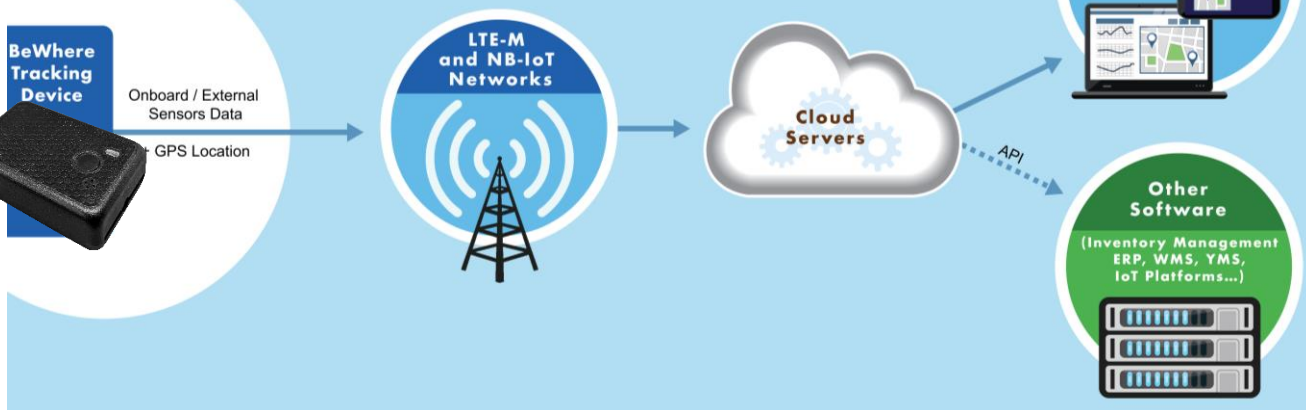
The BeMini is rechargeable with mini-USB, features sensors like temperature and light along with multiple location modules to enhance indoor location tracking. The BeMini smaller form factor is ideal for tracking smaller assets both indoor and outdoor.

Features

- Available on the following Radio Access Technologies: **B3-MIOT-GA** (M1 / NB1/ NB2)
- Rechargeable with mini-USB (included)
- Configurable alerting
- Motion tracking, triggering updates
- Outdoor Location: GNSS (GPS, BeiDou, Galileo, GLONASS and QZSS)
- Indoor Location: Wi-Fi / BLE 5.2
- IP67 Rugged and Dust / Water-proof enclosure
- On-board sensors
  - Temperature
  - Humidity
  - Pressure
  - Light
  - Accelerometer
  - Buzzer

Benefits

- Ultra-low power platform
- Low device cost
- Low deployment cost
- No reader needed
- Full coverage (indoor and rural areas)



See reverse for Technical Specifications

BeMini Technical Specifications

BEWHERE

General

Communication	LTE CAT **M1** / CAT **NB1/NB2**
Battery	Operating Voltage: 3.35 – 4.35V±0.02V Built-in rechargeable battery (Lithium-Polymer). Rechargeable via Micro-USB cable. Charge: 0℃~ +45℃ In-use: -30℃~ +60℃

Location

GPS Receiver	Gen9 VT of Qualcomm (GPS, GLONASS, BeiDou, Galileo and QZSS). Tracking & Navigation: –157 dBm Cold start: –146 dBm Hot start: –157 dBm
Wi-Fi Receiver	For Micro-location purpose only. Frequency: 2.4 GHz to 2.4835 GHz, Sensitivity: - 70 dBm

Cellular

Data	**LTE CAT M1** Packet Data (CoAP/UDP) **CAT NB1/NB2** Packet Data CoAP/LwM2M/I
Operating Bands and Carriers	**North America & Europe:** Cat **M1 /NB1(2)** **M1**: LTE-FDD: B2/B3/B4/B5/B8/ B12/B20 **NB1/NB2**: LTE-FDD: B2/B3/B4/B5/B8/ B12/B20 (AT&T, Bell, T-Mobile, Europe)
SIM	MFF2 (embedded SIM)

Sensor Operation Range (full accuracy)

Environmental	Temperature [-30, +60; Absolute accuracy ±0.5 °C] Humidity [Absolute accuracy ±3 %RH] Pressure [300...1100 hPa, Absolute accuracy ±1 hPa]
3-Axis Accelerometer	Motion

Certification

Certifications: FCC/IC, CTIA (PTCRB/OTA)

Network Targets*:
North America: T-Mobile, AT&T, Bell
International/Europe: MVNO, Deutsche Telekom, Telia, Orange, Vodafone

Vibration and Shock*: MIL-STD-810G

Ingress Protection*: IP67

Physical

Dimensions	57 x 36 x 20 mm | 2.24 x 1.4 x 0.79 inches
Weight	0.1 lb (50 gr)

Environmental Operating Range

Temp	-30C to +60C
Humidity	95% R.H. @ 50C non-condensing

Compliance Statement

A separation distance of 20 cm must be maintained between this device and nearby persons.
Une distance de séparation de 20 cm doit être maintenue entre cet appareil et les personnes à proximité.

FCC statement: "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."
"Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment."

IC statement:
This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:
(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
(1) L'appareil ne doit pas produire de brouillage;
(2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.