

Asset Management Tracker

The Asset Management Tracker pairs multi-constellation GNSS with BLE 5.0 scanning and global NB-IoT / LTE-M backhaul to give assets a single tag for seamless indoor & outdoor visibility. Dual 4 000 mAh Li-SOCI2 cells deliver years of autonomy in a sealed IP68 housing, while onboard motion, shock, door and barometric sensors turn raw location into rich utilisation intelligence—perfect for containers, equipment, and mission-critical transit cases.



Triple-Tech Positioning

GNSS (< 2.5 m CEP50), BLE (3 m RSSI) and optional Wi-Fi fingerprinting.

Ultra-Long Life

8 000 mAh battery ≈ 30 000 GNSS or 500 000 BLE reports; 15 µA standby.

Rugged IP68 Shell

-45 °C ... +85 °C, 0-95 % RH, PC/ABS with waterproof PCB coating.

Smart Motion Suite

6-axis IMU for movement duration, vibration, shock & tamper alerts.

Door/Seal Sensor

Magnetic switch flags unauthorised container or case openings.

Edge Payload Filter & Compression

Byte-level rules minimise cellular data costs.

Autonomous & Cached Modes

Offline logging with later burst upload when signal returns.

NFC & FOTA via BLE

Quick field provisioning and firmware upgrades without unsealing.

iBeacon Broadcasting

The device supports Bluetooth broadcasting using the iBeacon protocol, with a default UUID of F2-A5-2D-43-E0-AB-48-9C-B6-4C-4A-83-00-14-67-FD, and Major/Minor values are the last 4 bytes of the device's DevEUI. The UUID, Major, Minor, Interval, and TX power in the broadcast are all configurable.

SCENARIO



HEAVY-MACHINERY UTILISATION

Correlate vibration hours and shock events to schedule maintenance and prevent costly downtime.

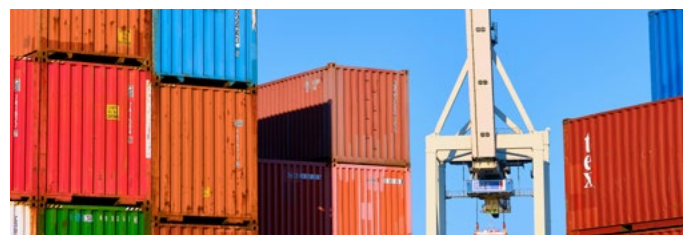


SMART-WAREHOUSE PALLET POOLS

BLE-tag pallets and use trackers on forklifts to map flow, cut search time and optimise layout.



PIPELINE INSPECTION KITS



CONTAINER TRACKING

Follow specialised NDT tools across rugged oil-&-gas sites; barometric altitude pinpoints underground or elevated sections.

Real-time geofence & door-open alerts secure intermodal sea-/rail containers across ports and depots.

SPECIFICATIONS

CONNECTIVITY

Protocol	MQTT, HTTP(S)
Encryption	AES128

LTE-FDD	Band	Data Rate (Peak)
LTE-M	B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B26/B27/ B28/B66/B85	588 (DL) 1119 (UL)
NB-IoT	B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B28/B66/ B71/B85	Cat NB2: 127 (DL) 158.5 (UL) Cat NB1: Max. 32 (DL) Max. 70 (UL)
Wifi	Optional, 2.4GHz, positioning only	N/A
SIM Card	Nano and eSIM	N/A

BLUETOOTH

Bluetooth Protocol	5.0, iBeacon
Bluetooth TX Power	-20 to +4 dBm TX power, configurable in 4 dBm steps
Bluetooth Sensitivity	-96dBm
Bluetooth Positioning Accuracy	3m
Advertise Interval	100ms ~ 10s adjustable
Coverage Range	150m sight distance

GNSS

GNSS	BDS/GPS/GLONASS/QZSS/SBAS
GNSS Position Accuracy	<2.5m(CEP50)
Cold Start Duration	30~120s
AGPS	Support

MECHANICS

Dimension	78x79x35mm with the mounting lugs; 78x66x35mm without the mounting lugs
Ingress Protection	IP68
Weight	133g
Operating Temperature	-45°C ~ +85°C

Storage Temperature	-60°C ~ +90°C
Operating Humidity	0% ~ 95% (non-condensing)
Housing Material	PC and ABS
PCB Coating	Water proof coating

POWER

Battery	Li/SOCl2 4000mAh x 2
GNSS (report interval > 10minutes)	Approx. 12,000 times
Bluetooth Positioning	Approx. 30,000 times
Standby Current	60µA
Max. Current	350mA

FUNCTIONS

Adjustable Position Report Interval	5s x n (1 to 65536)
Heartbeat Report Interval	30s x n (1 to 65536)
GNSS Position Report Interval	5s x n (1 to 65536)
FOTA over Bluetooth	Support
Movement Duration	Support
Fall Detection	Support
G-sensor	Support
Barometer	Support, 1m altitude accuracy
Battery Level Report	Support
Proximity Detection	Support
Switch	Button x 2
NFC Tag (optional)	1KB
Configurable Bluetooth data filter and payload report	Filter any data bytes in a Bluetooth payload and report any via NB-IoT and LTE-M
Bluetooth data compression	Support

ORDERING INFORMATION

Product Description	Part Number
Asset Management Tracker, NB-IoT<E-M, BLE5.0, 78x66x35mm, IP66, 8000mAh	100-ONBM4