TRACK 1115

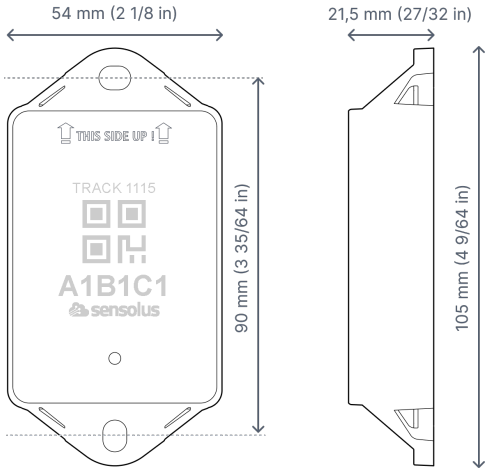
GNSS/Wi-Fi/BLE - NB-IoT/LTE-M

The small low-power tracker with long battery life. Indoor and outdoor localization, zone and high precision. Compatible with multiple external environmental sensors.

- GNSS
- Wi-Fi scanning
- Bluetooth geobeacon for zone precision

- NB-IoT
- LTE-M
- Europe and North America
- Data recovery

- IP68
- Flame retardant



105×54×21.5 mm
95g (7.6 oz)

Connectivity

NB-IoT and LTE-M

- Energy efficient transceiver
- Internal omnidirectional antenna
- Bi-directional communication
- NB-IoT and LTE-M bands: Europe/North America
- Data recovery
- OTA firmware upgrade (NB-IoT or LTE-M)

Bluetooth Low Energy (BLE)

Bluetooth Low Energy 5.0

Connectivity plan

- TRACK 1115 comes with the Extended connectivity plan

Geolocalization

GNSS

Multi GNSS constellation chipset (GPS+GALILEO)

Wi-Fi scanning

- Wi-Fi based geolocalization
- Wi-Fi 2.4 GHz

BLE

- Sensolus proximity beacon detection
- Detectable by zone and high precision anchors

Sensing

Internal

- Activity monitoring
- Orientation monitoring
- Virtual tamper detection
- Temperature monitoring
  - range: -20°C till 60°C (-4°F to 140°F)
  - typical accuracy: +/- 0.25°C (+/- 0.45°F)
  - worst case accuracy: +/- 1°C (+/- 1.8°F)
- Configurable shock detection

Environmental BLE sensors

- Temperature, humidity
- Fill level, contact, magnet
- Other BLE sensors can be added

Mounting

- Holes 6x8 mm. 90 mm distance between the centers of the mounting holes.

Mechanics & Design

Antennas

All antennas are internal

Size

105x54x21.5 mm (LWH)

Color

White

Water & dust resistance

IP68

Weight

95 gram

Operating temperature

-20°C to 60°C*

The specifics regarding operational temperature are contingent upon the application, installation circumstances, and environmental factors such as sunlight exposure. For further information, please reach out to Sensolus. Battery life can be affected when devices function for extended periods at the extremes of this range.

Casing

- Polycarbonate (lexan943A)
- Flame retardant
- UV-stabilized

Battery

- 3 to 8 years battery life depending on operating mode
- Replaceable battery pack 4600 mAh 3.0 V(Li-MnO_2)

Certifications

Regulatory

In progress

Electrical safety

In progress

Bluetooth 5.0

In progress

User Interaction

Device activation
Magnetic activation

Synchronize remote settings
- Instant: Magnet activation
- Periodic: No user interaction needed

LED feedback
Green & red LED feedback on the device

Management Services

Diagnostics
- Battery lifetime prediction
- Detailed energy consumption
- Geolocation diagnostics
- Installation
- Communication quality

Management
- OTA firmware updates over NB-IoT,LTE-M and BLE
- Remote configuration
- Tracker usage profiles
- External environmental sensors

Application services

- Localization
- Journeys
- Activity
- Utilization
- Connectable with environmental sensors
- Temperature detection
- Tilt detection
- Shock detection

Firmware configuration

Communication service
- Data recovery strategy
- Communication conditions

Location service
- Motion based,context based, periodic or scheduled
- Configurable update rate and journey detection
- Priority sequence (GNSS, Wi-Fi scanning , Bluetooth geobeacon)
- GNSS fix parameters
- Quuppa certified for high precision
- Indoor detection algo
- Wi-Fi scan strategy
- BLE scan strategy

General configuration
- Rule engine configuration
- Diagnostic levels
- Boot methods
- Accurate time synchronization

Orientation service
Orientation detection parameters

Environmental sensing
- Polling and aggregation strategy
- Alerts
- Edge processing parameters

Activity service
Activity detection parameters

Tamper service
Virtual tamper algo configuration

Shock detection
Shock algo detection parameters

Security

- Device unique encryption keys
- End to end payload encryption Chacha 20
- AES encrypted firmware
- Firmware upgrade allows only signed firmware images