

The rugged low-power tracker can be wired to an external power source. It has NB-IoT connectivity and guaranteed data recovery. The tracker provides general localization, zone and high precision. The tracker comes with an onboard temperature sensor and shock detection. Compatible with multiple external environmental sensors. The tracker firmware can be upgraded over the air.



130×72×36 mm  
212g (7.6 oz)

-  GNSS
-  Wi-Fi scanning
-  Bluetooth geobeacon for zone precision
-  NB-IoT
-  Europe and North America
-  Data recovery
-  Up to 12 years of back up battery
-  IP67
-  IK 09
-  Flame retardant

## Connectivity

### NB-IoT

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

### Bluetooth Low Energy (BLE)

Bluetooth Low Energy 5.0

## Geolocation

### GNSS

Multi GNSS constellation chipset (GPS+GALILEO)

### BLE

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

### Wi-Fi scanning

- Wi-Fi based geolocation
- Wi-Fi 2.4 GHz

## 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

### Connectable environmental BLE sensors

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

## Activation and mounting

- Activation manual
- Holes 7x9mm ( $\frac{9}{32} \times \frac{23}{64}$  in) for screws or rivets. 115 mm ( $4\frac{17}{32}$  in) distance between the centers of the mounting holes.
- Instructions for mounting the device can be found [here](#).

## Mechanics & Design

### Antennas

All antennas are internal

### Size

130x72x36 mm  
( $5\frac{1}{8} \times 2\frac{53}{64} \times 1\frac{27}{64}$  in)

### Weight

218 gram (7.68 oz) without cable

### Color

White and black

### Water & dust resistance

IP67

### Impact resistance

IK09

### Drop shock and vibration

EN 60068

### Operating temperature

-20°C to 60°C  
(-4°F to 140°F)\*

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

- PBT/PC 29 TM-Z2 FR UV LS
- Flame retardant
- UV-stabilized

## Power supply

### Voltage

Input voltage: 10 - 30 V DC with overvoltage protection

### Cable terminations

Connectors to the power source can be soldered to the cable ends

### Fuse recommendations

- > 500mA and < 1A fuse
- The TRACK1210 contains a non-resettable 1A slow blow fuse (Bel fuse 0685T1000) at its external power input.

### Typical power consumption

~3mA (idle)

### Max typical power consumption

- 300mA (@10V)
- 70mA (@30V)

## Back up battery

### Standard 3 cell

- Battery life depending on operating mode.
- User replaceable battery pack (Li-SoCl<sub>2</sub>) 12000 mAh
- 2.94 gram (0.1037oz) lithium

## Certifications

### Regulatory

- CE
- FCC
- IC

### Environmental

Drop shock

### Bluetooth 5.0

Declaration ID D068598

### Electrical safety

EN 62368-1

## 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 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

### General configuration

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

### Environmental sensing

- Polling and aggregation strategy
- Alerts
- Edge processing parameters

### Tamper service

Virtual tamper algo configuration

## Security

- Device unique encryption keys
- End to end payload encryption Chacha 20

## Accessories

CAB 8600: 6 m power cable for TRACK 1210

### 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
- Indoor detection algo
- Wi-Fi scan strategy
- BLE scan strategy

### Orientation service

Orientation detection parameters

### Activity service

Activity detection parameters

### Shock detection

Shock algo detection parameters

- AES encrypted firmware
- Firmware upgrade allows only signed firmware images