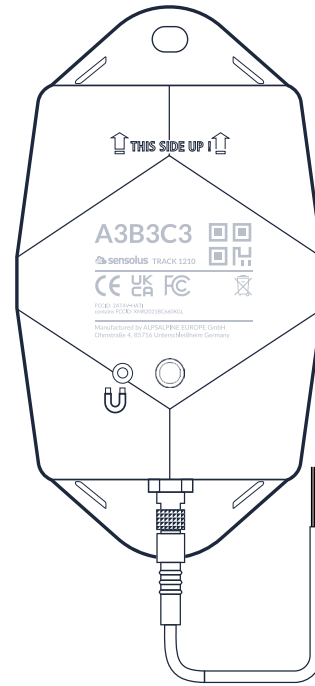


The rugged low-power tracker can be wired to an external power source. It has NB-IoT connectivity and guaranteed data recovery. The tracker provides general localization, zone and high precision. The tracker comes with an on-board temperature sensor and shock detection. Compatible with multiple external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

-  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
-  IP rating in progress
-  IK07
-  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)

Wi-Fi scanning

- Wi-Fi based geolocation
- 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, typical accuracy: +/- 0,25°C, worst case accuracy: +/- 1°C)
- Configurable shock detection

Connectable environmental BLE sensors

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

Mounting

- 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 are available in the [Sensolus documentation center](#).

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)(L W H)

Weight

218,3 gram (7.68 oz) without cable

Color

White and black

Casing

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

Water & dust resistance

IP 67

Impact resistance

IK07

Drop shock and vibration

EN 60068

Operating temperature

-20°C to 60°C (-4°F to 140°F) *

Battery life can be affected when devices function for extended periods at the extremes of this range.

Power supply

Voltage

Input voltage: 10 - 30 V DC with overvoltage protection

Typical power consumption

~3mA (idle)

Max typical power consumption

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

Fuse recommendations

- > 500mA and < 1A fuse
- The TRACK1210 has an internal fuse at the external power input
 - The fuse is rated at 1A (slow blow type)
 - This fuse is NOT resettable
 - Fuse used in the device: Bel fuse 0685T1000

Cable terminations

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

Back up battery

Standard 3 cell

- Battery life depending on operating mode.
- User replaceable battery pack (Li-SoCl₂) 12000 mAh
- 2.94 gram (0.1037oz) lithium

Certifications

Regulatory

- CE
- FCC
- IC

Environmental

Drop shock

User interaction

Device activation

Magnetic activation

Synchronize remote settings

- Instant: Magnet activation
- Periodic: No user interaction needed

Management services

Diagnostics

- Back up battery lifetime prediction
- Detailed energy consumption
- Geolocation diagnostics
- Installation
- Communication quality

Application services

- Localization
- Journeys
- Activity
- Utilization

Bluetooth 5.0

Declaration ID in progress

Electrical safety

EN 62368-1

LED feedback

Green & red LED feedback on the device

Management

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

- 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

Orientation service

- Orientation detection parameters

Activity service

- Activity detection parameters

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

Location service

- Motion based, context based, periodic or scheduled
- Configurable update rate and journey detection
- Priority sequence (GNSS, Wi-Fi scanning, Bluetooth geo-beacon)
- GNSS fix parameters
- Indoor detection algo
- Wi-Fi scan strategy
- BLE scan strategy

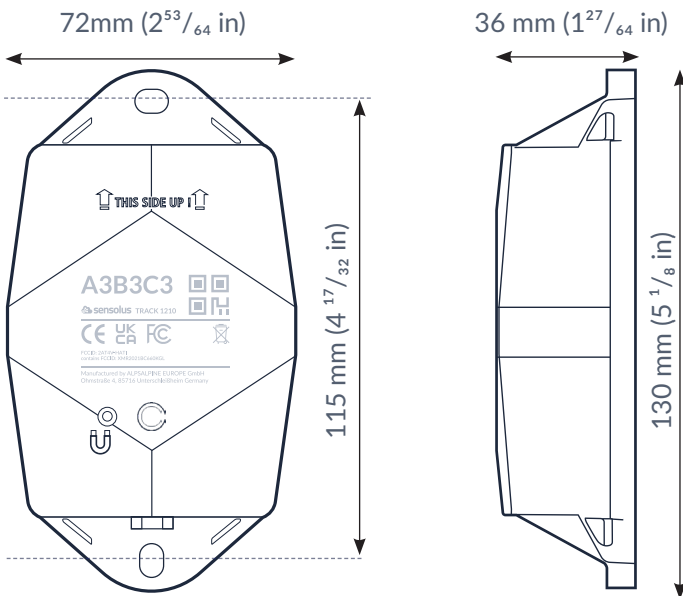
Environmental sensing

- Polling and aggregation strategy
- Alerts
- Edge processing parameters

Tamper service

- Virtual tamper algo configuration

Tracker measurements



Accessories

CAB 8600: 6 m power cable for TRACK 1210