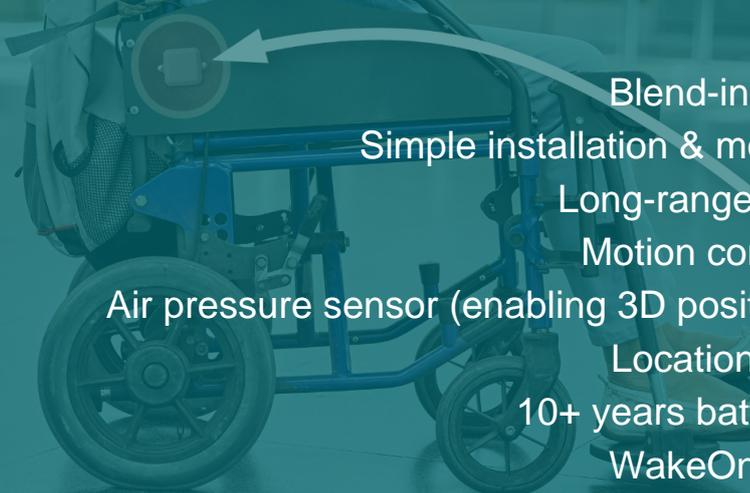




Square Tracker for LoRaWAN

Meet the compact indoor/outdoor LoRaWAN asset tracking sensor with long battery life



Blend-in design

Simple installation & mounting

Long-range (2 km)

Motion controlled

Air pressure sensor (enabling 3D positioning)

Location-aware

10+ years battery life

WakeOnImpact

Indoor

This compact sensor for LoRaWAN provides indoor and outdoor locations, using **GPS/Beidou and WiFi**. Like all Sensative products, it is designed with **precision and longevity** in mind. For instance, positioning can be **motion-triggered**, and the position calculation is performed in an external cloud service (rather than on-device) to save significant amounts of power.

The custom battery provides **many years of problem-free operations**. In contrast, most battery-powered asset-tracking devices last around a year before they need to be recharged or changed. Replacing batteries in hundreds or thousands of devices can be expensive, work-intensive, and lead to downtime, increasing overall operation and device ownership costs.

The Square Tracker comes in three different versions. The ultra-compact slim version is merely **7 mm thick** but yet provides **up to ten years of battery life** depending on application and transmission intervals. The medium and large versions are 15 mm thick and carry even larger batteries.

Our tracking sensors are designed to be user-friendly, easy to include in most LoRaWAN platforms, and **configurable over the air or NFC**. They also provide extra value by **monitoring the temperature** of the asset and its surroundings, highly interesting data in many applications.



DESCRIPTION

Square Tracker LoRaWAN

Square Tracker is a low-power device designed for accurate indoor positioning and asset tracking using Wi-Fi-based geolocation. By scanning nearby Wi-Fi MAC addresses, it enables reliable positioning in indoor or GPS-denied environments.

In addition to positioning, Square Tracker includes motion detection (3D accelerometer), air pressure, and temperature sensing, enabling advanced tracking use cases such as movement detection, tilt monitoring, and enhanced 3D positioning.

With configurable performance profiles and battery options, Square Tracker delivers up to 10 years of operation, enabling long-term, maintenance-free deployments without frequent battery replacements.

Typical use cases

- Indoor asset tracking in offices, hospitals, and facilities
- Equipment and inventory management
- Healthcare equipment tracking (e.g. beds, wheelchairs)
- Logistics and material flow monitoring
- Theft detection and movement alerts

Key advantages

- Accurate indoor positioning – Wi-Fi-based geolocation without GPS
- 3D positioning support – air pressure sensor enables floor-level detection
- Motion and tilt detection – built-in accelerometer for movement-based tracking and alarms
- Long battery life – up to 10 years depending on configuration
- Multi-function sensor – includes motion, air pressure, and temperature sensing
- Easy configuration – via NFC using an Android smartphone
- Compact and discreet design – suitable for professional environments

Advanced capabilities

Square Tracker uses Wi-Fi MAC address scanning combined with cloud-based positioning services to determine location indoors.

The integrated air pressure sensor enables improved vertical positioning (floor detection) when used together with reference sensors.

The built-in 3D accelerometer supports:

- Motion detection
- Tilt detection
- Theft and movement alarms
- Energy-saving features such as sleep mode

Battery options & form factor

Square Tracker is available in two hardware configurations:

- 750 mAh (7 mm thickness)
 - Slim form factor
 - Up to 10 years battery life with daily position updates
- 6.0 Ah (15 mm thickness)
 - Extended battery capacity
 - Up to 10 years battery life with hourly position updates

This allows optimization between update frequency, battery life, and device size depending on the application.

Installation

Square Tracker can be mounted using adhesive for quick installation, or with the Sensitive Square Screw Mounting Kit (optional) for secure and permanent mounting.

Smart geolocation (without GPS)

Square Tracker supports cloud-based Wi-Fi geolocation, enabling positioning in indoor or GPS-denied environments by scanning nearby Wi-Fi networks.

This functionality requires a compatible cloud service such as Sensitive Yggio.

Rev B, 2026-0318

IMAGE GALLERY



SPECIFICATION

Application

Application Tracking, Asset management

Benefits

Benefits Blend-in design, Simple installation & mounting, Long-range (2 km), Motion controlled, Air pressure sensor (enabling 3D positioning), Location-aware, 10+ years battery life, WakeOnImpact

In/Outdoor usage Indoor

Features

Sensor Geolocation, Temperature, 3D accelerometer, Air pressure

Configuration LoRaWAN OTAA, NFC

Geopositioning WIFI 2.4 GHz

Connectivity data

Frequency EU (868 MHz) or India (868 MHz) or US (915 MHz) or AU915 - Australia 915 - 928 MHz or AS923-1 - Asia 902 - 928 MHz or KR920 - South Korea 902 - 928 MHz or AS923-2 - Asia 923-925 MHz

Protocols / Connectivity LoRaWAN, NFC

LoRaWAN version V 1.0.4

LoRaWAN class Class A

Sensor data

Temperature accuracy ± 2 °C/ 3.6 °F @ 0-30 °C/32-86°F

Power supply

Powered by 750 mAh or 6.0 Ah

Powered by Built-in battery (LiMnO2), Non-replaceable battery

Operating Conditions

IP Class 64

Operating range -20 - +60 °C

Mechanical data

Weight (g) 23/87

Width (mm) 58

Depth (mm) 7-15

Height (mm) 58

March 26, 2026 8:25 am

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