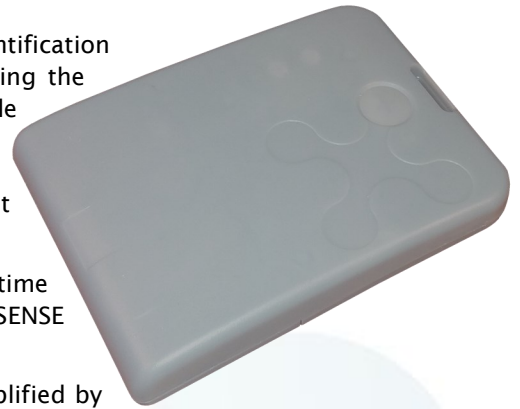# TRK-Slim

TRK-Slim is an innovative product dedicated to identification and localization services. As a 'flight recorder' retracing the activity of your equipment, TRK-Slim efficiently handle various automatic identification applications, asset management, on-demand inventory, tracking flow of people and assets, secure location, Check-in/Check-out control...

Thanks to state-of-the-art approach, combining real-time location (RTLS) and long-range reading services, INEO-SENSE offers a new way to solve active RFID issues.

Based on LoRa technology, data collection is thus simplified by the TRK-Tracer's ability to connect to operators's LoRaWAN networks. Nevertheless, it can be easily operated in Clover-Net private network as well as taking benefit of free operator costs and added value services, all with an extremely light weight infrastructure, easy to deploy.

In addition, this TRK-Slim embeds sensors allowing relevant application scenarios to fit any use case (Motion, Tilt, Tamper, Temperature...). INEO-SENSE can study with you any new sensor solutions to go even further in the innovative features

LoRaWAN™

Featured for RTLS

Real Time Localization system is addressed involving smart and flexible RF communication capabilities to detect zones in short range and reporting them remotely in long range. Moreover, sensors like motion sensors, magnetic reed or temperature allow to trigger plenty of scenarios related to movement, location or even environment variables.

An unprecedented real-time check-in process allows to quickly collect a set of tracers in a restricted area in a minimum of time.

Applications

Integrated in a complete solution, this device is dedicated to Asset Tracking. Battery powered, this fixable version opens the door to many use cases like package tracking, mobile equipment localization, portable power tools surveillance and more.

This tracer allows 2 working philosophies: real-time notification triggered on events or event/zoning logging with delayed collection. Both cases can be run simultaneously.

Advanced capabilities

Battery powered, it takes benefit of all advanced features with very high added value and flexible settings to insure real-time motion tracking, real-time zoning and long range report with a minimum of energy required to work several years.

More than a device which pushes simple periodic message, full 2-way mechanisms with smart communication settings management allows remote configuration, fast inventory broadcasts or even smart RF medium management, all of them taking care of power consumption for battery powered applications.

Based on Clover-Core framework, it is capable of dynamically switch from Clover-Net to LoRaWAN, remote report is achieved in any condition.

Moreover, unprecedented functions are available such as Network management, RTC auto–propagation, Over The Air (OTA) firmware updates, parameters and advanced data logging management (data and events) and so on.
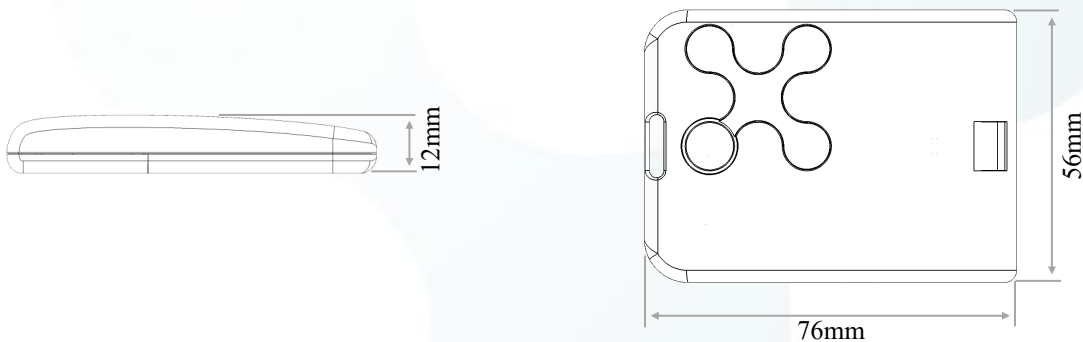
Hardware features

- ABS Grey casing
- Protection IP44 (more as option)
- Average weight : Personal 65g
- Removable batteries
- Bicolor led for activity & event alerts
- One Motion sensor dedicated to Tilt & shock detection.
- Operating temperature :-20˚ to +60˚ C (−4˚ to 158˚ F)
- Highly optimized for long battery life in the field (> 2 years)
- Optimum industrial conception for efficient cost positioning.

Operating modes

- Standby mode : Remote On/Off switch
- Zoning detection allowing real time localization within 5 to 150m range positioning
- Periodic transmission : Regular presence frame (every 1min to 45 days)
- Motion alarm : Alarm frame on characterized shock & movement
- On demand Localization : for one, a group or all Tags in the area
- Lon worker protection using Motion combined with Tilt sensing
- Digital alarm : Alarm transmission triggered on digital input (push button)
- Real time clock scheduler : Allowing automatic operational mode switch.
- Datalogging events : Rolling Storage of the tags events (Up to 10 000).
- 256 bytes memory available for custom applicative data storage.
- OTA: Over The Air Firmware upgrade .

Dimensions

12mm

56mm

76mm

Order references

Order #	Description
TRK-TAG-LT-X8X-001	868MHz IP44 Slim

Clover-Net generic features

- Transmission range up to 5,000m line of sight, up 500m indoor.
- Real-time 2-way communications: Scheduled transmission, automatic alarms and on-demand reading.
- Robust against physical and electronic inter-ferences.
- Fast event reactivity, huge coexistence ability.
- Low cost for mass deployment
- Auto RTC propagation

- Native Three bands compatibilities (433, 868 and 915Mhz)
- CE & EN 300-220 & FCC 15-247 compliant
- LoRaWAN compatible
- Use Multi-channel frequencies and FHSS to avoid collision.
- Dedicated alarm frequency channel.
- Data Encryption by AES 128 with dynamic key mixt
- Include Full networks services (Broadcast with an-swer, Repeater, Mesh, …)