

# TRK-Tracer®

TRK-Tracer® is an innovative product dedicated to identification and localization services. As a 'flight recorder' retracing the activity of your equipment, TRK-Tracer® efficiently handles 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' 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 of this with an extremely light weight infrastructure, easy to deploy.

In addition, this TRK-Tracer® 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.



## 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-PC Grey casing
- Protection IP55 (IP66 as option)
- Average weight : 85g
- Bicolor led for activity & event alerts
- 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 (> 3 years)
- Optimum industrial conception for efficient cost positioning



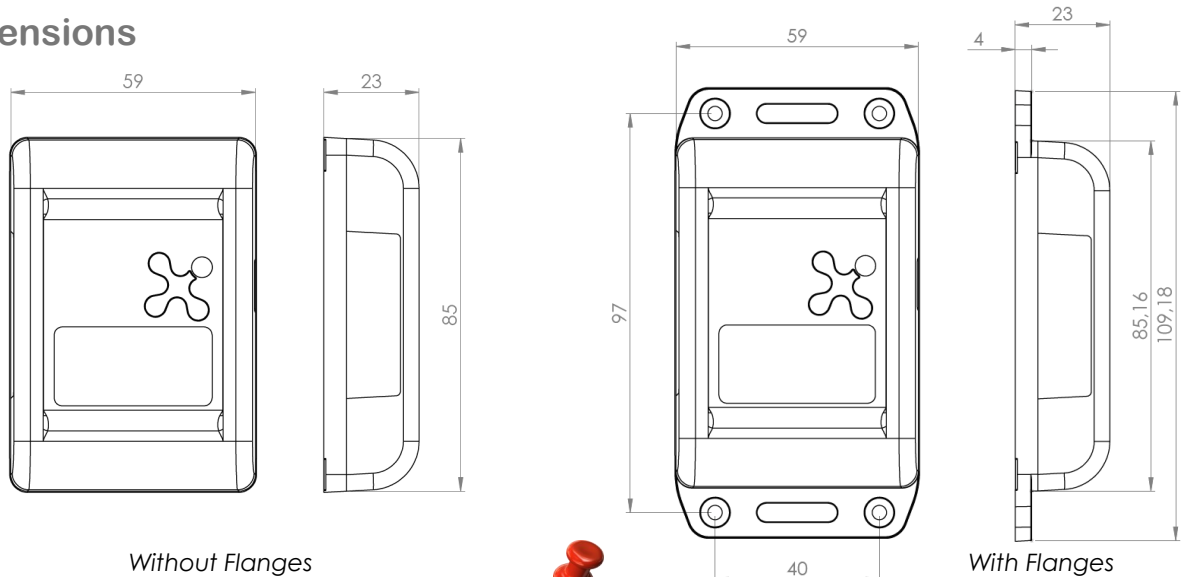
## Operating modes

- 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 tracers in the area
- Real time clock scheduler : Allowing automatic operational mode switch
- Data logging events : Rolling Storage of the tracer events (Up to 10 000)
- 256 bytes memory available for custom applicative data storage
- OTA: Over The Air Firmware upgrade

## Order references

Order #	Description
TRK-INO-MAIR-X8X-510	868MHz IP55 - With flanges
TRK-INO-MAIR-X8X-610	868MHz IP66 - With flanges
TRK-INE-MAIR-X8X-510	868MHz IP55 - Without flanges
TRK-INE-MAIR-X8X-610	868MHz IP66 - Without flange

## Dimensions



Without Flanges

With Flanges

### 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 interferences.
- Fast event reactivity, huge coexistence ability.
- Low cost for mass deployment
- Auto RTC propagation
- Native triband compatibility (433, 868 and 915Mhz)
- CE & EN 300-220 & FCC 15-247 compliant
- LoRaWAN compatible
- Uses Multi-channel frequencies to avoid collision.
- Dedicated alarm frequency channel.
- Data Encryption by AES 128 with dynamic key mixt
- Includes Full networks services ( Broadcast, Repeater, Mesh, ...)