

CargoObserver-Track-XXL -Track&Sense-XXL



The durable tracking solution for every freight car



CargoObserver-Track(&Sense)-XXL are specially optimized for use cases in the railway industry where the need for very long lasting battery packs with a maintenance free lifetime of at least 6 years is required. This reduces service costs and allows our customers focusing on optimizing their transportation processes and to more effectively manage their assets. The Track&Sense variant allows for additional external wireless sensors.



The behavior of the CargoObserver-Track(&Sense)-XXL units can be fully parameterized remotely in order to meet the unique customer requirements even as they change. Developed for the harsh railway environment, the very energy efficient solution is the result of several years of research and development with University and Industrial partners. Well known international enterprises trust on the reliability and the long life cycle of our overall system solution.

Key Product Features

- Precise localization also when mounted in partly covered areas of the asset
- Configurable Move and Stop reports
- Periodic, time triggered reports
- Device based geofencing alarms
- Precise rail mileage
- 3-Axis Acceleration Meter
- Wireless MultiProtocol Sensor Interface, Bluetooth Low Energy 5.0 and ITSS 2 Ready

Advantages

Unsurpassed long battery life

- Maintenance free min. 6 years at one report every 15min while moving
- Very wide temperature range -40 + 85°C
- Mounting at almost any location of the asset

Full cost control

- Operating modes adjustable via web
- Lowest total cost of ownership
- All-Inclusive data service with fixed monthly rates and no hidden costs

Flexible and quick to deploy mounting

- Installed in seconds with strong magnets
- Alternative theft protective screw mount option

CargoObserver-Track(&Sense)-XXL is the solution for energy self-sufficient tracking on freight cars

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Technical Specification

Physical

Dimensions	224x123x46
Weight	1130g
Mounting Options	Screw, Magnets or adhesive

Environmental Conditions

Operating Temperature	-40°C to +85°C
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Communication

GSM	Quadband
Frequency Range	850/900/1800/1900 MHz
Communication	GPRS with SMS Fallback
4G Mobile Network	4G NB-IoT / Cat-M1

Sensors & Sensor Interface

GPS / GNSS	GPS, Glonass, Galileo
3-Axis Acceleration	+/- 16g
Wireless Extension (only Track&Sense Variant)	Bluetooth Low Energy 5.0 sowie ITSS 2 Ready Interface

Power Supply and Lifetime

Battery	Industrial Lithium primary cells
Power Management	Proprietary PicoPower Techn.
Battery Lifetime -XXL	Ave. 7 years at 24 Pos./Day

Standards

EN61000-6-2, EN61000-6-4, ETSI EN301 489-1, EN301 489-7
EN50121-3-2:2015, EN61373, EN50155

Customers Benefits

Faster locating of assets and real-time overview of assets location and distribution among sites.

Future prove **Wireless Sensor Interface** for upcoming ITSS 2 Standard or state of the art Bluetooth Low Energy sensor applications.

Imporved Mileage based Maintenance of rail cars.

Optimized Supply Chain Management improves long term passage of goods.

Higher utilisation of assets and hence reduction of total assets and lower cycle time.

Higher security by monitoring geofencing areas and transport routes.

Flexible Integration into Existing IT:

The All-In-One Data Service from CargoMon delivers customized asset data directly to your existing IT system without added cost.

The screenshot displays the 'Wireless Cargo Monitoring Portal' interface. It features a navigation menu with 'Group Overview', 'User Settings', and 'Maintenance'. The main content area is divided into several sections:

- Object Details:** A table listing asset events with columns for Date, Time, CC, Location, Event, and Type. The table shows a history of movements and stops across various Italian locations like 'Autostrada Serenissima / Veneto / Italy'.
- Map:** A map showing the current location of the asset (CargObserver ObjectName4430016, BoxId: 4430016) in Madrid, Spain. The map includes a route history and a detailed view of the current location.
- Configuration Panel:** A sidebar with settings for 'Actual Operation Mode' (Periodic Position Mode), 'Last Report 8d 6h ago on address M.111 / 28860 / Madrid / Community of Madrid / Spain', and various notification filters (Temp (IN), Temp (OUT), Humidity, Acceleration, Stop/Move, Geo ENTER, Geo EXIT).

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