

Cloud Solution

INTRANAV Global Valuable Shipping

DIGITAL Supply Chain: **Global Track&Trace** and **Sensor Data Monitoring** of your load carriers

With **INTRANAV** you track your load carriers globally in real-time and monitor them with **INTRANAV SMART** sensors. This allows you to intervene in time in case of condition deviations during transport (as well as in standing position) to avoid dangerous situations.

Safety Box Tracking: Lithium-Ion Batteries

Often safety containers are subject to strict official regulations and are therefore declared as dangerous goods due to their load (including lithium-ion batteries).

An external temperature sensor can determine values within the container in real-time, which increases process reliability by permanently monitoring the lithium-ion batteries. The **INTRANAV** Real-Time Location System supports container management in minimizing the risk of temperature damage that could occur during transport or storage of the lithium-ion batteries. If during transport, the range between -40° and 80° , is exceeded or undercut, a notification is generated to warn of temperature override. This notification can be sent via SMS, e-mail or any other supported medium to a responsible contact.

Plug & Play Cloud Solution

INTRANAV Real-Time & Sensor Data Monitoring Features

- **Digital Twin of your load carriers via INTRANAV.IO:** End-to-end **outdoor live tracking** (GPS technology)
- **INTRANAV SMART Sensors are monitoring:** Temperature, humidity, acceleration/shock (IMU), certified airplane mode
- **Real-time alerts** via SMS & e-mail in case of deviations from specified limits or process interruptions
- **Hazard monitoring** for chemical and battery containers
- **AUTO-ID:** Scannerless bookings
- **2D/3D geofence** based zones and events
- **Storage safety:** compliance with the storage and transport guidelines
- **Transport safety:** Ensuring the transport guidelines
- **App for damage reports**

DIGITAL Supply Chain Monitoring

Theft Protection

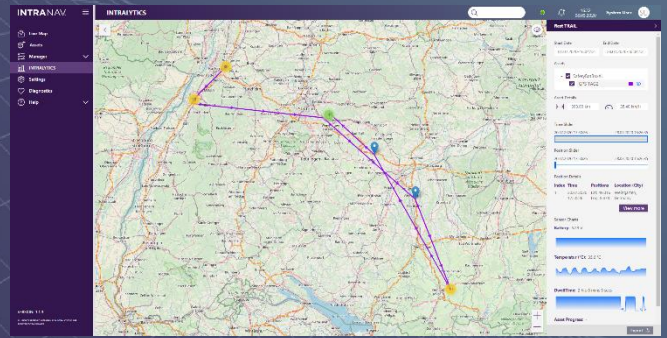
The (Safety-) containers are made of solid stainless steel and represent a high value as an asset itself. The determination of the position from our GPS solution does not only help to digitize (Digital Twin) and track, but also serves as theft protection.

INTRANAV Warning System

If defective or damaged lithium-ion batteries are transported, **INTRANAV** can be used as an early warning system. By monitoring the inside of the container, the thermal reaction of a battery can be detected and reported by a notification. By detecting the chemical reaction, further safety measures can be initiated. E.g. evacuation of hall areas or leaving motorways during transport from escaping hydrofluoric acid. To protect employees, the early warning system can be taken much faster.

Control of the Transport Conditions

With **INTRANAV** Sensor Data Monitoring you can prove with the **INTRANAV.IO** IoT Platform in real time or via reports that transport guidelines such as temperature, air pressure, acceleration (vibration) were adhered to or if there was a deviation. Deliveries with breakage or similar are thus immediately detectable.



INTRANAV.IO Digital Twin Platform & **INTRALYTICS** Analytics Suite: With **TRAILS** Report(s) you can analyze the routes covered by your load carriers and keep an eye on the freight status of your load carriers at all times.

Your INTRANAV Benefits

- + Maximum process reliability
- + Control of the transport conditions
- + Theft protection
- + Reduce search times
- + Reduction of current operating costs through **AUTO-ID**
- + Employee safety through **Sensor Data Monitoring**
- + Proof of compliance with transport conditions
- + Automated load carrier management through **Geo-fence based events**
- + Coupling to **SAP, Analytics and many other systems (open interface)**

It's that easy!



Activation of the INTRANAV Plug & Play Solution



Attach INTRANAV.RTLS TAG (Tracker) to the Shipment Box



Real-time tracking & Sensor Data Monitoring of your load carriers via the INTRANAV.IO Platform



Scale INTRANAV Digital Twin Suite as required per device

These customers have already successfully implemented RTLS & Digitization projects with **INTRANAV**:

