# Smart Logistics & Tracking

« From multisite asset tracking...
...to accurate indoor positioning »



in partnership with



#### **Context**

Many industries have identified the need to track their goods and equipment to optimize logistic flows and secure their assets, not only between different production sites, but also inside a building. Traditional asset tracking technologies are unfortunately restricted to address the entire supply chain applications, due to a lack of features or to inadequate battery life-time and prices. To overcome such challenges, IoT technologies appears as the suitable answer for industrials and logisticians, on both technical and economic stand points.







**Retail, logistics** 



Health, hospitals



**Construction sites** 

### **Challenges**



How to optimize flows of containers between all my storage sites (rolls, boxes, trolleys, pallets... etc)? How to improve rotations? How to decrease sites retention?



How to make automatic inventories on each of my sites, and on the different areas of my building? How to quickly find my equipment?



How to ensure equipment and goods tracking during the transport, up to the delivery? How to prevent delivery mistakes?



How to ensure the integrity of my goods and the right storage and transport conditions (temperature, delivery times, shocks, losses, etc.)?

## **Kerlink & Wyres solution**

Wyres' solution for supply chain allows tracking logistics and industrial assets on the different sites of production, storage or distribution, but also to benefit from a precise indoor positioning, with several levels of accuracy.







Accross all sites On th

On the road Down to 50cm indoor location

Multi sensors

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#### **Architecture & Benefits**



For indoor positioning, IoT beacons must be placed all over the walls of the building, and tags must be placed on the equipment to track. Beacons send a signal that makes the geolocation possible thanks to the triangulation method. Several technologies are used for triangulation: FSK, Bluetooth Low Energy, or Ultra Wideband. The choice of the technology depends on the required accuracy, and on the use case. When the tags leave the indoor infrastructure of beacons, they automatically switch to public or private LoRaWAN™ network, with LoRa® geolocation without GPS (TDOA).

### Ask for your turnkey Indoor or Seamless Discovery Kit!



10 LoRa (FSK) Beacons

.

4 LoRa (FSK) & BLE Tags



4 BLF **Beacons** 



1 Wirnet<sup>™</sup> iFemtoCell



- 3 months access to Wanesy<sup>™</sup> Management Center (LNS)
- 3 months access to Wyres GLM interface + APIs
- Services: prestaging (declaration of GW and devices in WMC) training, support and debriefing
- 1 Beaconer (synchronizer)
- sales@kerlink.fr +33 2 99 12 29 00 1 rue Jacqueline Auriol 35235 Thorigné-Fouillard France



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- 1 Tic Toc Beacon (for seamless)
- 3 months access to Wanesy™ Geolocation (for seamless)

