

## LoRa Tag Datasheet

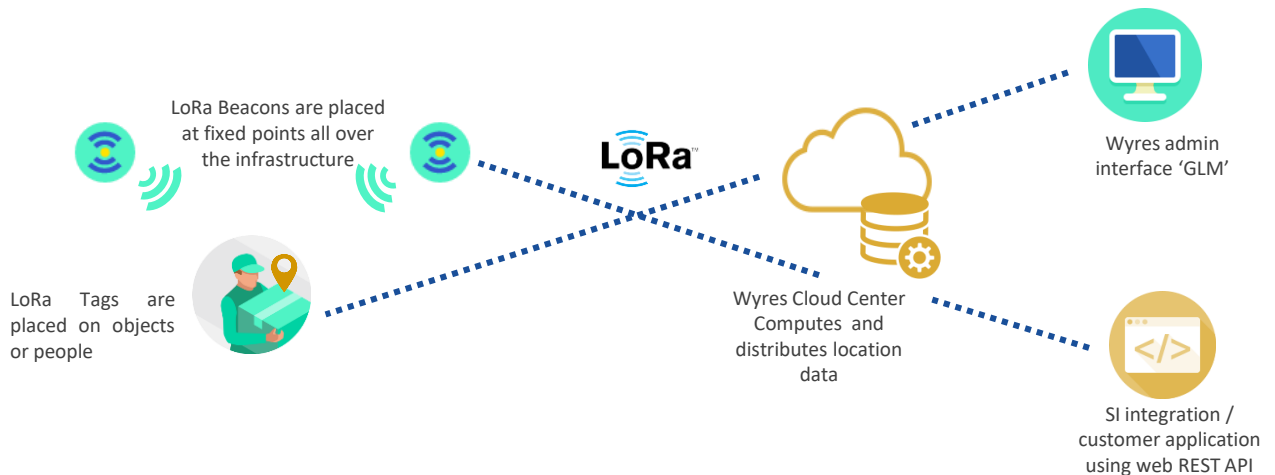
Geolocation has  
never been easier



Wyres provides an indoor geolocation solution based on cloud fusion of multiple technologies: LoRaWAN, LoRa Beacons and BLE Beacons. These technologies can be deployed as required throughout a site. For example, an overview of LoRa Beacons is shown below.

### Overview of Wyres geolocation system

LoRa Beacons provide fixed points of reference for the system, installed on walls or pillars of buildings. They enable the positioning of the mobile LoRa Tags. LoRa Beacons broadcast their ids by radio, and the LoRa Tags send this information to the Wyres Cloud Computing center via a LoRaWAN Network. Location and environmental data is then available through Wyres admin interface or through a set of REST APIs.



### Description of LoRa Tags

LoRa Tags are placed on mobile objects or people. They are able to measure the RSSI signal of the beacons, and then to send the information via LoRaWAN to Wyres' cloud, where the position can be computed.

Wyres tags can use private LoRaWAN networks on site, and public LoRaWAN networks off-site, allowing geolocation nationally.

More than simple geolocation tags, they are also smart connected devices including sensors for environmental monitoring and safety applications.

### Benefits

- Smart devices providing both geolocation, and safety / environmental monitoring
- Suitable for large infrastructures thanks to the communication range of LoRa technology
- LoRa encoding ensures no interference with Wifi and other RF systems already installed onsite.
- Highly modular hardware capabilities

### Key Features

- Up to 3 years battery life
- LoRaWAN 1.0/1.1 compliant
- Indoor LoRaTag geolocation with 5-10 meters accuracy
- Network roaming to switch from private to public LoRaWAN networks
- Allows offsite geolocation with up to 100 meters accuracy (depends on public network)
- Equipped with sensors enabling safety applications and environmental monitoring (accelerometer, temperature, light, pressure)
- Extensible with additional sensors (button etc)
- Firmware update Over The Air (FOTA) enabled
- Battery level monitoring