

## LoRa / BLE Tag Preliminary Datasheet

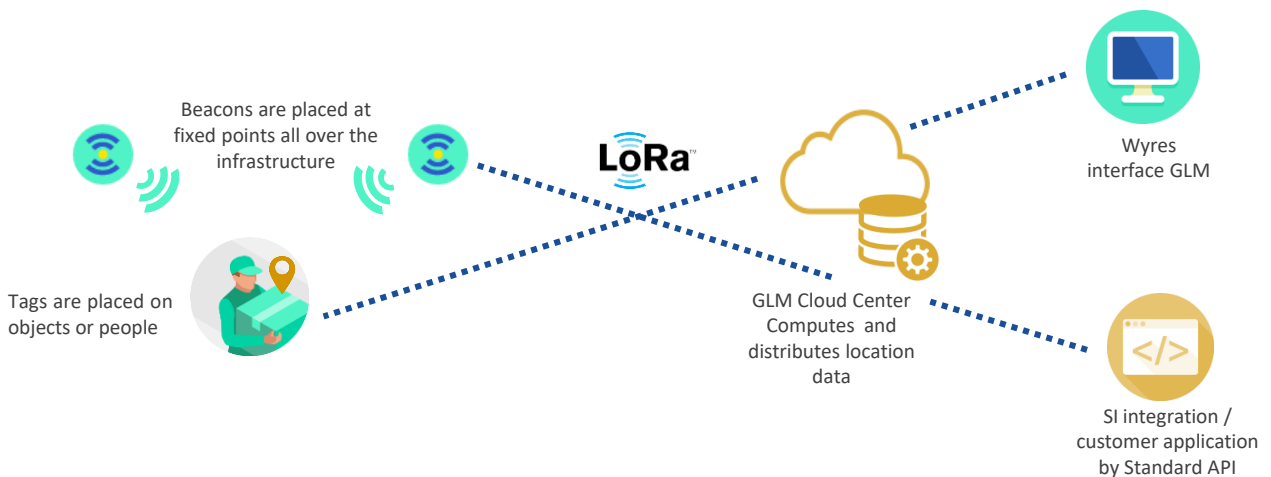
Geolocation has  
never been easier



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 and LE an Beacons provide fixed points of reference for the system, installed on walls or pillars of buildings. They enable the positioning of the mobile LoRa/BLE Tags. LoRa and BLE 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 / BLE Tags

LoRa / BLE Tags are able to detect LoRa beacons, as well as BLE Beacons (iBeacons). They must be placed on people or objects, and they measure RSSI signals in FSK and/or BLE. Then, they send the RSSI data to Wyres Cloud Center via a LoRa communication (private or public networks). BLE location allows to improve the accuracy at specific points of the infrastructure.

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

### Benefits

- Multi-method geolocation enabling to adapt the accuracy in the diverse areas
- Suitable for large infrastructures thanks to the wide range of LoRa communication
- No interferences with Wifi and other RF systems already installed onsite.
- Wide modularity and settings capabilities

### Key Features

- Up to 1 years battery life
- LoRaWAN and Bluetooth 4.2 compliant
- 5 to 10 meters accuracy in FSK
- Down to 1 meter accuracy in Bluetooth
- LoRa network roaming enabling to switch from private to public networks (offsite)
- Allows offsite geolocation with 100 meters accuracy
- Equipped with sensors enabling safety applications and environmental monitoring (accelerometer, temperature, light, pressure)
- Compatible with additional sensors
- Firmware update Over The Air (FOTA)
- Monitoring of battery level