

# Real Time Indoor positioning system

## Wi4B TECHNOLOGY



**Locate the position and movement of people and assets**

Wi4B SOLUTIONS... BRINGING THE FUTURE ONE STEP CLOSER...

## INTEGRATED COMMUNICATION SYSTEM FOR SECURITY MONITORING & CONTROL

Sometimes people don't realize they are entering a confined space, limited access or hazardous area. You can be alerted if someone is entering in these locations. Having a real time mapping across a limited area gives you a number of possibilities to avoid accidents, to prevent dangerous behaviour improving security and efficiency.

Wi4B real-time tracking platform is a system that allows to locate people and assets using an advanced technology composed of small radio nodes to be placed in the rooms or in the hallways to be monitored, without any cable, and various types of wearable devices (key rings, bracelets, tags, ...) to be delivered to people/assets to be localized.

Each time a person moves from one room to another, or along the corridor, the position will be sent to the control center in real time. In every situation the control center is able to provide the exact map of people/assets.

It is possible in a easy way to know the people present in a reference area, or trigger warnings if a person approaches a confined space. Furthermore it is possible to notice if the device is dropped.

Panic buttons can be included in the wearables, in order to send the operator notification with an alarm immediately sent to the main control center.

### APPLICATION

Safety improvements  
Access management & controls  
Indoor real time localization  
locate people in entire buildings  
Critical task in locating people during alerts



### ADVANTAGES

- ▶ **Ease Of Deployment:** One of the big issues in the deployment of a IPS service is the high costs in the deploy of the network .  
Ease Of Deployment
- ▶ **Reduced Cost**  
No need to purchase, install and maintain large amounts of costly infrastructure
- ▶ **Small tags:** One of the constraints in deploying these solution is the maintenance cost. The devices provided to employees, visitors or clients must be compact and with no maintenance.  
The Wi4B solution permits to choose several devices from the market, with coin batteries that reach more than one year, without any maintenance costs.
- ▶ **Business Intelligence:** Enables the automat-ed collection of all sorts of statistics and business information.
- ▶ **High reliability:** more than 20k Wi4B devices are installed worldwide.
- ▶ **Infinitely scalable cloud platform**
- ▶ **Cross Platform SDK**

### TECHNOLOGY

Wi4B used its long experience in Wireless sensor networks to create an heterogeneous network based on its IEEE 802.15.4 mesh network platform, used as the neural infrastructure to collect the information, in combination with BLE radio transceivers in order to create a distributed BLE coverage for BLE devices.

This approach is unique and permits to deploy easily the neural infrastructure ready to track the location of targets moving in the area.

Until now, wireless networks have been unable to provide reliable coverage to support safety solutions combined with a low cost in the deployment.

The possibility to extend the radio coverage without replanning the area, add infrastructure nodes without cabling, improve the location precision using distributed collaborative information are some of the advantages in the solution.

The wireless sensor nodes permit to acquire information from the enviroment and transmit them to the control center.



## SECURE ACCESS CONTROL

Grant access to your application on a need-to-know basis and protect vital business data.

## AUTOMATIC FAILURE REPORT

The platform keeps the user updated through a notification's system by email and in app's notification. It generates automatically alerts to the user on information related to automated processes or not. The alerts are different types according to set levels. When a scheduled report is not received, an agent sends an email to notify the user/system administrator of the failure.

## ACCURATE AND REAL TIME DATA

All information that the system passes to the platform is saved and can be consulted in subsequent stages. The solution makes it possible to interact and display it in real time on any connected device.

## MAP BASED VISUALIZATION

Among the possible visualizations of the information, there is also the display of a map. The map is interactive and allows you to interact with the objects and obtain timely information

## BUSINESS INTELLIGENCE

Data provided is an important input to business intelligence strategies.



## INCREASED PRODUCTIVITY

Wi4B technology enables system integrators to create intelligent location-based services such as: emergency response, panic alerting, entrance/exit control, critical area protection, and intelligent lone worker solutions.

This approach can be used in order to provide:

- ▶ Comprehensive Positioning
- ▶ Entrance & Exit Notification
- ▶ Critical & Safe Area Protection
- ▶ Access control
- ▶ Tracking of people
- ▶ Identification of persons
- ▶ Wander prevention in healthcare
- ▶ Collision prevention with forklifts and operator
- ▶ Workflow optimization
- ▶ Asset management



## DECREASED RESPONSE TIME

It can be used in conjunction with Alarm Control platform in order to send an alarm notification if a worker or asset enters or leaves certain predefined zones, or to provide location data of a worker in distress.

In this way, if the service is used for safety purposes, staff can be safeguarded no matter where they are located. Should a worker be in distress, the location can be used to send and dispatch personal safety alarms to response teams (including the last known location of the worker).



At Wi4B, our corporate mission is to deliver practical, indoor location solutions that provide value to our customers. Our commitment is to provide end-to-end solutions that reduce cost and enhance performance with measurable return on investment.



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