

## INDOOR & OUTDOOR POSITIONING

### REAL TIME LOCATION SYSTEM/RTLS

The RTLS solution protect people by providing real-time information about their location when in need and giving rescuers a tool for quick response. Users benefits from a unique platform combining indoor and outdoor positioning with the solutions automated emergency alarm handling.

The Real Time Location System (RTLS) integrates several technologies in one solution:

- Bluetooth for indoor positioning.
- GPS positioning when outside building.
- Support for SmartPhones, DMR and TETRA radios as well as GSM panic alarm devices.
- Integrated with the ZONITH Bluetooth ID Badge and ZONITH Panic Button

## Indoor Positioning

Locate employees using any always discoverable Bluetooth device, including DMR & TETRA radios, SmartPhones and the ZONITH Bluetooth ID Badge. ZONITH'S RTLS provides real-time location data using strategically placed ZONITH Bluetooth Receivers connected to the buildings LAN. Receivers are continually monitored for disconnection and have a range of 5 to 20 metres (subject to the environment). The more Beacons/Receivers installed, the more precise the location data.

Customers are not bound to a specific brand of handheld device; they can switch or add Bluetooth devices at any time.

BLUETOOTH RECEIVER



### Comprehensive Positioning

Receivers can be installed throughout the building for full coverage, giving high positioning accuracy.



### Entrance & Exit Monitoring

Receivers can be configured to monitor all entrance & exit points.



### Large Area or Floors

When an employee enters or exits a designated zone, RTLS can tell which floor or area an employee is located in, with very few beacons.



### Locate & Track

- ZONITH Bluetooth ID Badge
- DMR and/or TETRA radios
- SmartPhones
- Other 'always discoverable' Bluetooth devices

## Outdoor Positioning

ZONITH'S RTLS locates and tracks employees outdoors via their GPS-enabled device, regularly transmitting its current GPS position to the RTLS server. Outdoor areas requiring monitoring are configured using customisable GPS geo-fences, displaying the users current location within that geo-fence.

Should an address be required the RTLS can provide this as well using online maps.

For organisations having no access to maps on the Internet, off-line maps can be provided too.



## Combined Positioning

By combining indoor and outdoor positioning, staff are safeguarded no matter their location.



### Single User Interface

By combining Bluetooth and GPS technology, staff can be located from any position in or around a facility. When leaving the Bluetooth area and going outdoors, staff handsets will seamlessly switch to GPS.

### Indoor & Outdoor Geo-Fences

The RTLS can utilise geo-fences, which are freely defined virtual boundaries, to determine location. A geo-fence can be given logical names such as 'Parking Lot' or 'Front Entrance' which allows staff to instantly know where an incident has occurred.

### Why are geo-fences important?

During an emergency, the response team is notified of the employee's last location- 'John has raised a Panic Alarm at North Gate Area'- saving valuable time. Geo-fences can also be used to raise alarms if someone enters a specific location like an explosive area, or if a vehicle deviates from a planned route.



## Enhance Worker Safety with RTLS in combination with...

### Alarm Control System

When paired with ZONITH's Alarm Control System (ACS), RTLS can automatically trigger an alarm should an employee enter/exit a predetermined zone. ACS filters the alarm to the appropriate person based on their location, schedule & competency.



### Lone-Worker protection

Lone Worker protection (L-W) periodically pings workers to verify their well-being. Should a worker fail to respond to an 'Alive Check' message, an alarm is raised notifying the response team. L-W can also be activated when a geo-fence is crossed. For example, if a staff member enters an unsafe area like a boiler room, the geo-fence will automatically enable L-W. When they return to the safe area like the break room, L-W is disabled.



## RTLS

# ZONITH Real Time Location System

### Single User Interface

There is a seamless transition between GPS and Bluetooth technology when moving in and out of buildings.

### Quickly Identify Staff

Each tracked device is identified by the user's device ID or name and represented on the custom floor plan (indoors) and maps (outdoors).

### Easily Identified Location Icons

Each tracked device type, like guards, service staff or vehicles, can be represented by a freely uploaded icon on the map display. The colour of the icon is dynamically updated to show the status of the device.

### Zoom & Track

Each tracked device can be easily located just by clicking on the device name in the overview list. RTLS will zoom into the exact location of the device or person. If the device is in alarm state it automatically moves to the top of the overview list and is highlighted in red.

### Show only when in alarm state

RTLS can be enabled to show the position of staff only when they have pressed the panic button or when the lone-worker alarm has been activated. All other tracking will not be shown.

### Historical position logging and playback

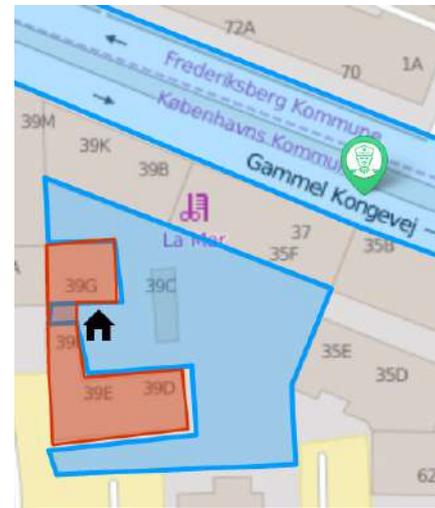
With RTLS all tracking activity, inside and outside, can be stored. The user interface provides a tool for playback of historical positioning data.

### Web-browser Access

Access the RTLS user interface through a web browser from any computer or mobile phone. Access is limited to authorized personnel and is password protected. This solution does not require cookies or apps to be installed, as it is based on the latest browser technology, allowing for immediate location updates.

### Utilise Existing Communication Infrastructure

Most facilities have existing LAN infrastructure that can be used for connection of the Bluetooth Receivers and transmission of indoor positioning data. RTLS thereby enables a more efficient use of the users LAN infrastructure and a higher ROI for their equipment.



Map showing security guard icon

## ABOUT ZONITH

ZONITH is a manufacturer of solutions for Alarm Handling, Positioning and Staff Safety. Based in Copenhagen and Warsaw, ZONITH enhances the safety of thousands of people every day.

For more information visit: [www.zonith.com](http://www.zonith.com)