



Rúa Fonte das Abelleiras, s/n. Edificio CITEXVI, local 14
36310 Vigo, Pontevedra, Spain
[+34] 986 120 430 | gradiant@gradiant.org
www.gradiant.org



LIFESENSOR

Technology for life
monitoring

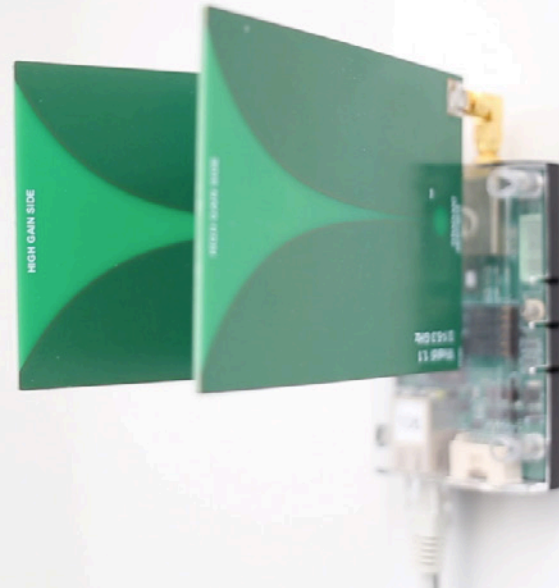


LifeSensor

LifeSensor by Gradiant is a remote liveness detection technology, based on respiratory monitoring and agitation measuring.

Our solution allows to monitor the respiratory rhythm and movement of a person in a non-invasive way, optimizing surveillance by means of a radar system that detects the existence or absence of breathing.

The UWB technology used has a detection range of up to six meters, but also works through materials such as clothing or sheets, but also wood or briks. Embedded in drones, LifeSensor can be used for searching and rescuing survivors near **the surface** in natural catastrophes. This device can be also used to detect non-respiration events and to monitor a person's state, by measuring their respiratory rate and the agitation level during sleep.



Highlights

- ✓ Real-time alarms to warn of any significant interruption of breathing
- ✓ Non-invasive cordless device oriented to monitor people in vulnerable situations
- ✓ Measures through materials (sheets, mattresses and bricks)
- ✓ Monitoring people in rooms/cells (smart homes, geriatrics, psychiatric institutions, and detention cells)
- ✓ Sleep monitoring and sleep apnea diagnosis
- ✓ Search and rescue of people trapped under debris near the surface
- ✓ Supports and assures privacy

Technical details

Modules

Radar Unit: 2 directive antennas + 1 UWB module.

Processing Unit: Software (Gradiant). Right now, standalone application.

Performance

Maximum working distance: > 6m

Breathing rate accuracy: +/-2 breaths/minute

Sensitivity for non respiration events: >95%

Response time (for non respiration events): 30s

Integration Requirements

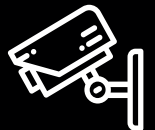
The client would need to develop an application that interacts with the library to obtain and visualize the results.



Health



Welfare



Security