

Industry 4.0

Outstanding Internet of Objects.
For office, production
and warehouse spaces.

Smart Factory

Smart Factory is an end-to-end IOT solution that registers key parameters of the office and warehouse space with the use of dedicated sensors and enables ongoing monitoring of the spaces and automatic detection of hazards at an early stage of the incident.

The system permits defining and observing the parameters of the spaces, tracking the trends, risk fluctuations, as well as predicting and detecting hazards. In the case of an incident, the system alarms all the concerned people about it and if an

emergency occurs, rescue services or the building security are notified so that an early intervention and minimisation of damage and its effects are possible.

The following parameters are monitored by the system:



Fire and smoke



Temperature and humidity



Water flooding



Gas leakage



Unauthorised intrusion



Machinery breakdown

The system creates a notification of each defined anomaly, increasing the prevention area in the risk management process from the earliest level.

Moving the fire alarm panel to the cloud

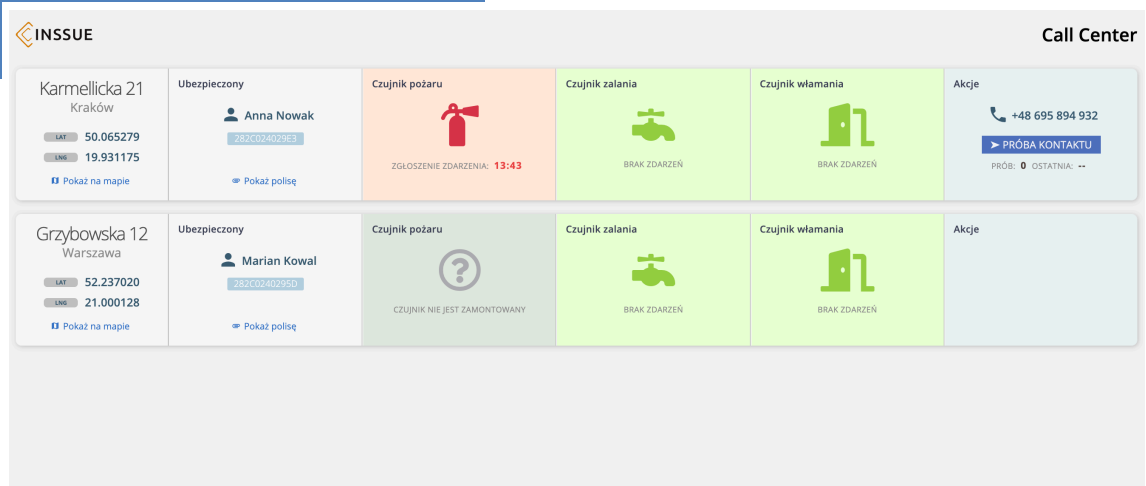
- The solution is based on the Microsoft Azure cloud, as part of which artificial intelligence algorithms control the messages received from wireless sensors.
- Thanks to that the system is activated immediately and does not require participation of qualified specialists. Moreover, the system monitors and learns phenomena in order to warn about hazards at the earliest risk stage.

Sensors

- The system is composed of certified sensors present in the IOT environment, which are distributed within the protected facility. It runs remotely and independently in terms of communication. Given the size of the space and the protected area, the solution applies wireless sensors or those dedicated to a connection with the electricity grid, in each case independent in terms of communication.
- The sensors manufactured by Polon Alfa ADR-20N hold the certificate of the Polish Scientific and Research Centre for Fire Protection (CNBOP) no. 1918/2005.
- Owing to the state-of-the-art technologies, simple installation and reliability, the system will perfectly live up to the challenges of small and medium spaces, where it is expensive and time-consuming to install sprinkler systems or traditional systems based on fire alarm panels, or even impossible in the case of archives, book collections or heritage structures.

Alarm

If a hazard occurs, the system initiates an alarm and remotely notifies the specified units of the facility administration – the policyholder and the insurer. Communication is performed via an alarm signal in the facility, API communication and SMS text messages.



Manager Panel

- The user panel enables ongoing monitoring of the facility, definition of sensor parameters and notifications in case of hazard.
- Moreover, the system provides periodic reports on the monitoring process together with information about deviations and trends, as well as permits management and administration of the system's features.
- The Call Centre panel is intended for the unit that monitors risk and hazard occurrence on a continuous basis.

