

# USE CASE

## Robbery Prevention Solution With TEKTELIC VIVID Sensors

During the last few years, there is a big increase in the number of devices connected to the Internet. All these devices are part of the Internet of Things (IoT) infrastructure that allows us to collect information from all kinds of mediums, communicate and exchange data among devices without a need for any human intervention.

**Today Smart Home is a significant part of IoT that allows people to control different aspects of their lives remotely using the network of smart devices and sensors.** One of the most important factors that we usually consider when talking about Smart Home is Security.

Our Partner, **IVU Softwareentwicklung GmbH** is a software development company focused on smart metering for utility companies and metering service providers in Germany. Since 2016 a customizable LoRaWAN® network and application server is part of IVU's portfolio including +100 supported IoT devices. IVU offers a full service around the planning and establishment of a LoRaWAN® infrastructure including provisioning of gateways and sensor devices as well as integration via APIs into backend systems and visualization platforms.

- **Company:** IVU
- **Country:** Germany
- **Type:** Smart Buildings
- **Products used:** VIVID Sensors
- **Challenge:** Building security and Intrusion protection



# CHALLENGE

Initially, home security systems meant having an alarm that went off when someone intruded on a building, but with the development of the Internet of Things, a smart secure home can do much more than that.

Therefore, the main challenge for the **IVU Softwareentwicklung GmbH** company is to develop a system that can alert the owner and

others of an intruder by sending a notification to their smartphones. The owner will also be able to turn off or start the alarm remotely using only their smartphone. This system will help users secure their homes, offices, stores, and apartments by placing the system on doors or windows and monitoring activity through their smartphones.



# SOLUTION

**TEKTELIC**, a global leader in End-to-End IoT Products and Solutions, has been working to perfect the deployment of IoT Networks and Solutions for the best efficiency, high reliability, cost-effectiveness, and ease of operation. TEKTELIC solutions are not only unique because of how they are designed, but because of their ease of deployment, operation, and high reliability to help the consumer become a part of the IoT ecosystem.

To support **IVU Softwareentwicklung GmbH** in their efforts to provide a Robbery Prevention solution, TEKTELIC is providing **VIVID sensors**, the dynamic, most versatile sensor in the LoRaWAN® ecosystem.

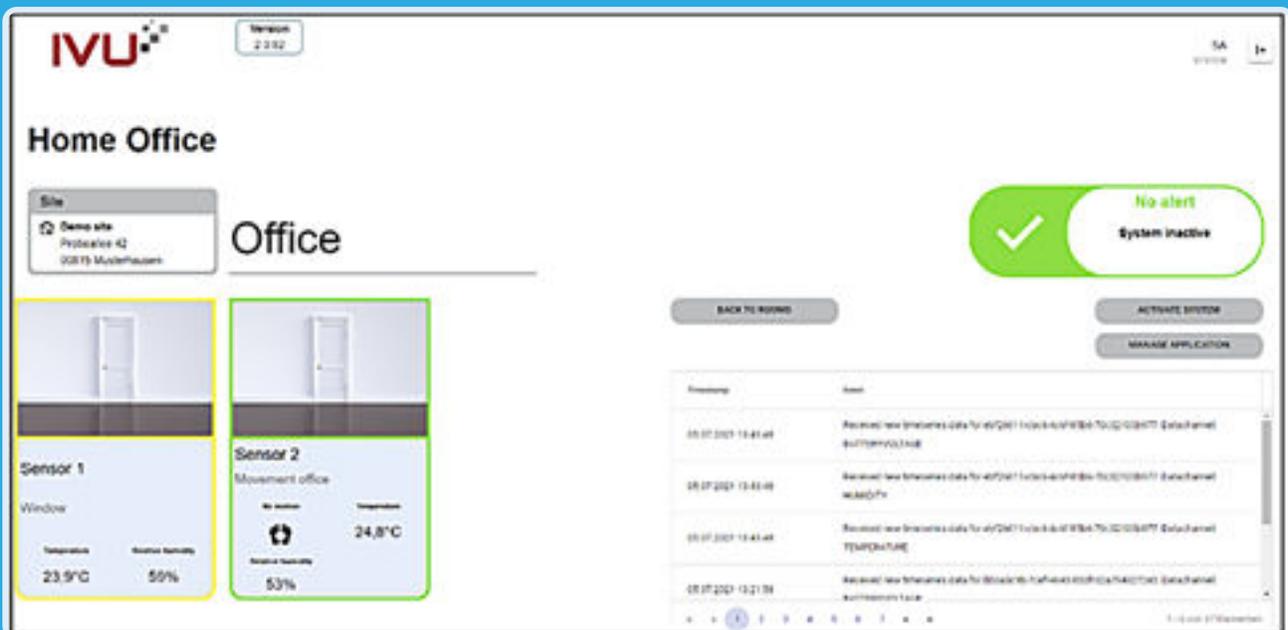
**VIVID**, with a long list of sensing functions, is optimized for long battery life of up to 10

years and excellent RF performance. It could be quickly and cost-effectively deployed and placed on doors or windows to provide reliable environment monitoring data. LoRaWAN®-based security solution allows homes and buildings to be secured, and detect unauthorized openings and motion.



**VIVID** PIR Smart Room Sensor

## The Software Solution of IVU:



The screenshot displays the IVU software interface for a 'Home Office' site. The interface includes a site selection dropdown, a 'Office' title, and two sensor status cards. Sensor 1 (Window) shows a temperature of 23.5°C and 50% battery. Sensor 2 (Movement office) shows a temperature of 24.8°C and 53% battery. A 'No alert' status is shown with a green checkmark, and the system is inactive. Control buttons for 'BACK TO ROOMS', 'ACTIVATE SYSTEM', and 'MANAGE APPLICATION' are visible. A log table at the bottom shows system events.

Timestamp	Event
08.07.2021 18:43:48	Received new telemetry data for 48726711 (lockdoor@1847010202077) (data channel) BATTERY/TEMP
08.07.2021 18:43:48	Received new telemetry data for 48726711 (lockdoor@1847010202077) (data channel) WARMUP
08.07.2021 18:43:48	Received new telemetry data for 48726711 (lockdoor@1847010202077) (data channel) TEMPERATURE
08.07.2021 19:21:08	Received new telemetry data for 88066666 (hahaus@1847010202077) (data channel) WARMUP/TEMP

# CONCLUSION

IoT is becoming a key driver for improving operational efficiencies globally, and all industries are now experiencing the benefits of having better insights into their assets and equipment.

TEKTELIC offered a LoRaWAN® based wireless solution implemented with their industry-leading Smart Room Sensors PIR as it met IVU Softwareentwicklung GmbH need to find a reliable sensors to create a packaged solution for continuously managing and securing home, office or store.

To learn more about IVU Softwareentwicklung GmbH please visit <https://www.ivugmbh.de>

To learn more about TEKTELIC's complete End-to-End IoT solutions, please contact [info@tektelic.com](mailto:info@tektelic.com)

