



Know your status (answer your questions), choose your action

Insight in Anything

What do we do

We help you to monitor, collect and present data of your things. This way we enable you to optimize the value of these things, objects, goods, articles, plants, animals, buildings, rooms, anything...

With ZENSIE 30Mhz supplies sensor-technology, to monitor any type of physical object, interconnected via a cloud based network. This way we enable you to collect, store and analyze the data these objects return: movement, vibration, audio, indoor climate, anything. Our personalized applications present the data collected in a way best suited to your needs. The data gathered can be used to optimize the value of these objects, signal potential threads, or gently nudge people to use the objects in a more effective way.

We are innovators; our focus is on the application of sensor-technology in the broadest possible way. We do not pretend to bring solutions to all problems of our customers; they are the experts in their field. We provide these experts with additional real-time information so they can base their decisions on the actual data. Describe to us what your specific situation is, and what information is missing. With our knowledge of sensors, applications & networks, and your knowledge of your business, we create a cost-effective monitoring system that allows you to improve your business.

Our way of working

ZENSIE is more than a box, we are not a traditional supplier, we build partnerships with our customers. We bring our expertise, you bring yours...

You tell us about your specific situation and the type of information you need. We bring our knowledge of sensor-technology to the discussion. Collecting data is not the difficult part, creation of valuable information is. Depending on your requirements we build the application and reporting tools that is suited to your needs.

This can only be achieved by having a **mutual partnership** with our customers. As you learn from your information, we learn from our experiences in the different projects we are involved in. Lessons learned will be shared in our community to generate new ideas and inspire new implementations.

We sell service subscriptions for our applications. Selling hardware is not our core-business; however we can provide any type of sensor. In that case, we do charge a fee for all hardware components, the ownership of which is transferred to the customer upon purchase. As a responsible vendor we strongly believe customers must be allowed to re-use existing sensors already installed. Our added value is to make sure these sensors are used in the most effective way by creating resilient, reliable, secure and personalized applications in the cloud. This way we can keep the costs of acquisition as low as possible, and our solutions available for small and large customers alike.

Sensor technology made easy

Detect a status change, publish it via the cloud to any device of the correct person interested. Sensor-technology made easy...

The Internet of Things, a network of physical objects that share information on their status, growth, location etc. Based on the integration of sensor-technology and communication solutions. The promise of a smart world announced by many, has not been delivered so far, apart from some expensive niche applications. That is, until ZENSIE.

At the base of it all the sensor; a piece of hardware whose purpose is to sense (that is, to detect) some characteristic of its environment. 30MHz offers **full flexibility** in the type of sensor required. Our standard portfolio includes sensors for analysis, detection, localization and identification of light, temperature, air humidity, movement and (hazardous) substances. When not in our standard portfolio we source for it on the market. **Required** reliability & accuracy are key to the choice of sensor, not the supplier.

We make the sensor data available to our customers in **real-time**; via an adaptive dashboard, accessible from any type of device; or via notification via sms or email. The data is also stored or for long-term analysis and reporting. How do we do this? By creating a cloud based wireless network of these sensors via our own sensor-blocks. The security and reliability of your data is our main concern. We have years of experience how to build resilient and reliable cloud based applications.





Agriculture



Monitor your greenhouse 24/7 to maximize crop yield and minimize risks...



Phalaenopsis (orchids) are susceptible to ethylene; symptoms are bud dehydration and drop. Lasting damage occurs with an exposure to only 11 ppb (parts-per-billion) ethylene during 8 hours. Greenhouses are heated by gas-heaters, the exhaust gasses are sent into the greenhouse, as the CO₂ is beneficial to the plant growth. This is in fact a risk, when the gas-heaters are burning at a lower than 100% efficiency, a by-product is ethylene. Next to this the plants themselves emit ethylene when under duress. Growers counter this by the preventive use of chemicals. Apart from the environmental concern of these ethylene busters the additional costs can be substantial.

Wouldn't it be great? To constantly monitor the ethylene concentration in the greenhouse to save on the use of chemicals.

While the question is in fact a request for a simple and cost-effective ethylene sensor we took it a step further by including all current sensory equipment (temperature, humidity) and ethylene into one single application accessible via a smartphone. We also included a mobile unit that measures the same conditions in the truck during delivery. This can be used as proof the plants are handled with care until they reach the destination.





Space occupancy

Effective use of office space to suit your way of working...

A large welfare organization contacted 30MHz with the following problem. They receive their clients in consulting rooms that are booked by the counselors via their agenda. The rooms are fully booked weeks ahead, while in reality the rooms are unoccupied. Reason: Counselors hardly ever bother to release the room when a meeting is cancelled. In the mornings, clients can come to the office without appointment. This leads to counselors and clients browsing through the corridors in search of a room. When another client is late for the appointment they frequently find their booked room occupied. The rooms have motion sensors connected to an 'Occupied' sign outside.

Wouldn't it be great? When you would have a real-time insight in what rooms are actually occupied and which room can be used without causing inconvenience?

Using the existing **motion sensors** 30MHz created a consulting room dashboard available to the receptionists.

When a client visits unannounced they call the counselor and can directly point out an available room. They can also remind counselors to release a booked room that is not occupied when no rooms are available.



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Storage

Notify any disturbance to the cellar where you keep your valuable and delicate wines to guard their quality and keep them safe...



Fine wine is a typical commodity that improves with age, but the quality can also rapidly deteriorate if the conditions that it is kept in are less than perfect. The temperature of the storage room is crucial, wine develops slower at low temperatures and temperatures over 25°C can spoil the wine. Light and humidity are also factors to consider. According to some experts a humidity of less than 75% can cause the cork to dry out. Furthermore; a damaged wine label due to prolonged exposure to light might look rustic, it also causes the potential buyer to distrust the storage conditions and therefore the wine itself. A final consideration is security for expensive wines.

Wouldn't it be great? To monitor the environment and security of your wine cellar constantly, allow you to get a real-time overview wherever you are, and receive notifications on disruptions 24/7.

With our ZENSIE system we can create a cost-effective environment control unit that is available for all sizes of storage. We can combine temperature, light, humidity and motion sensors in a single dashboard to monitor your valuable wine cellar 24/7. This not only keeps the wines in a perfect condition, it also helps establish their value in the unfortunate case of an insurance claim and can keep the insurance premium down.





Retail

Track the movement of customers in your store, which spot is hot, which is not...

A retail chain that sells the same goods in multiple shops found the articles that more popular to differ for each location. There is no clear demographic reason for this. While there are general guidelines how to display the articles, the managers find it difficult to comply with these rules as each shop has a different lay-out. The visual appeal for customers walking through the door often is decisive how to display.

Wouldn't it be great? That you would be able to monitor the movement of customers in your shop?

Using motion sensors 30MHz can create a localization grid to monitor customer movement for each shop. We can track the route to each display, and the amount of time spent at a certain place. When the route taken to certain displays proves to be particularly long and chaotic it points out the articles, while in demand, could not be found without extensive searching. Furthermore the manager can receive a notification when the cash register area is overcrowded. When the store is closed the same movement sensors are used for security.





Safety & Security

Enhance the amount of information available in emergency situations and save time to respond...



Starting with the UK in 1992 in more and more European countries the installation of smoke detectors is compulsory in all newly build houses. Unfortunately the vast majority of these are not connected to a central Alarm Response Center due to the costs involved. The same applies to vast amount of offices and production locations, even with laboratories, schools and universities.

Valuable time is lost to alert the response units that have to conduct a room by room search to find the source of the local alarm. The same applies to stand-alone hazardous substance alarms. What floor was the incident that triggered the alarm?

Wouldn't it be great? To have an overview of all safety detectors on the premises in a single dashboard that is accessible while you wait outside at the evacuation area for the response units to arrive.

30Mhz has unlocked existing smoke and hazardous substance detectors with ZENSIE. We connect these stand-alone detectors and allow them to be monitored remotely. Value thresholds can be used to trigger a silent alarm before the evacuation sirens sound, allowing for appropriate measures to be taken. Information on the location of the first detector to trigger an alarm is kept in the application.

