WISeSat

Powered by FOSSA - Secured by WISeKey

IIoT

Collect data, perform analysis and optimize the production of your industry and infrastructure in remote areas.

The Industrial Internet of Things is the key element of the fourth industrial revolution (or Industry 4.0), which is based on a network of a multitude of industrial devices connected by communications technologies that result in systems that can monitor, collect, exchange , analyze and deliver information on assets.

IIoT combines machine-to-machine (m2m), advanced data analytics, machine learning, and human interaction using a network of connected devices, delivering valuable information for smarter business decision-making. In this way, IIoT is able to drive unprecedented levels of productivity, efficiency and performance that enable industrial companies to improve financial and operational benefits.

IIoT applications

- **Provide intelligence to facilities:** the IoT allows us to hyperconnect all critical devices, to obtain information that allows command posts to make the best strategic decisions.
- **Improved process efficiency:** with IoT, machinery can be automated more easily, resulting in an optimization of the efficiency of all processes.
- **Fleet management and optimization:** IoT allows you to have information in real time, such as the location of products and variations in their status due to alterations in transport, small shocks or sudden changes in temperature, in remote areas where there is no GSM coverage.
- **Predictive and remote maintenance:** a machine with IoT sensors can be remotely monitored, having information, in real time, about its status. With this information we can monitor assets and be notified when breakdowns occur.
- **Industrial security:** IOT devices allow keeping all assets monitored, through sensors, which makes it possible to detect faults remotely and reduce the occupational risk of operators.

XL Sensor

Our industrial sensor for IoT connectivity with satellites in remote areas.
It acts as an independent and autonomous industrial solution to send and receive data, which is collected by the sensors attached to it, to our satellites.

WHY OUR TECHNOLOGY?

WISeSat is a **picosatellite platform** that provides **dedicated and secure IoT communications** to companies and industries that need to monitor and know **the status of assets in remote locations, where there is no mobile coverage.**

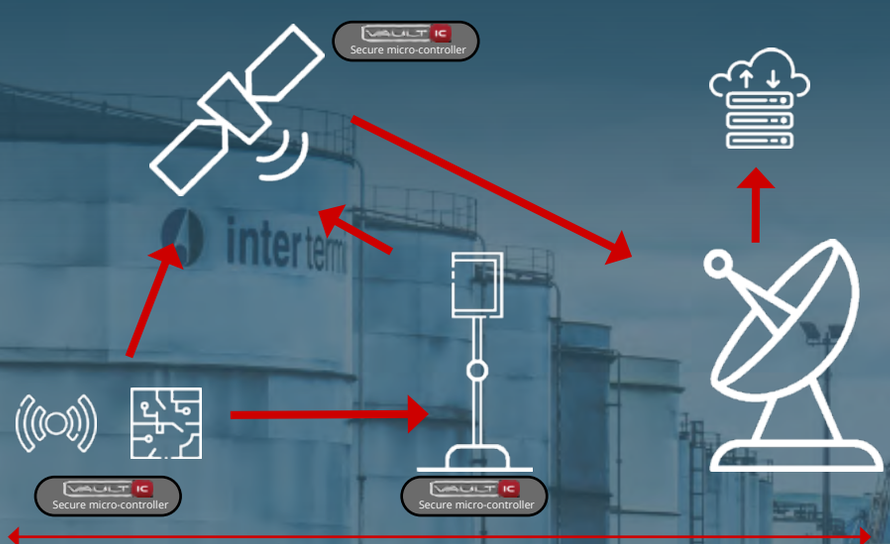
Reduced size and mass: The weight, less than 1kg, of our picosatellites, and the development in-house of our sensors, allow us to reduce development and launch costs.

Standardized platforms: We reduce integration and manufacturing times due to the homogeneous and standardized of our platforms.

COTS Components: COTS (Commercial Off-The-Shelf) components increase performance and allow us to continually innovate.

- Connect anywhere and everywhere on Earth.
- Cost competitive even compared to traditional ground-based solutions.
- FIPS 140-3 CMVP secure elements to secure devices, data & transmission.
- Backward compatibility for “brown-field” deployment on existing ecosystems.
- Seamless integration into ecosystems already using ground-based connectivity.
- Customized and scalable.

HOW OUR TECHNOLOGY WORKS



The sensors, distributed by the study assets, collect, encrypt and extract the most valid information from the parameters analyzed using predictive algorithms.

These sensors act in a **sustainable and autonomous way**: they do not need batteries for their operation, they are charged with solar energy; and they do not require orders to collect and send data, they work in an automated way.

The sensors send this encrypted data to the picosatellite.

Subsequently, these secure and informative data are **sent** by the picosatellite **to a ground station,** where they are collected and sent to our cloud service.

Our cloud service collects and stores all this data and, through an online **dashboard** or through an **API integration**, all the **information** that the farmer needs about the status of his crop is **displayed**.

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