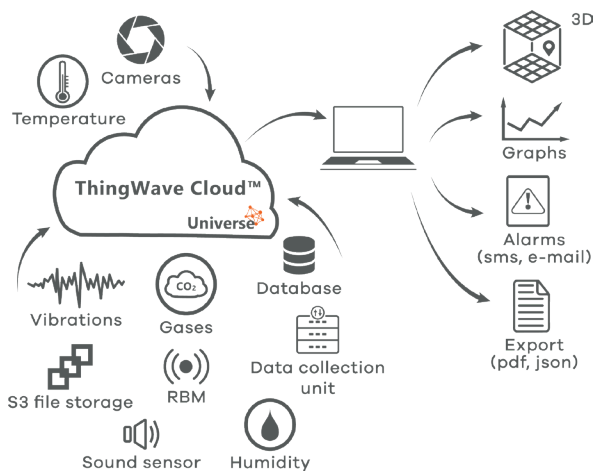


Condition Monitoring by ThingWave's Wireless Sensors

IIoT serves as a new vision of IoT in the industrial sector by automating smart objects for sensing, collecting, processing, and communicating the real-time events in industrial operations. The major objective of IIoT is to achieve high operational efficiency, increased productivity, and better management of industrial assets and processes.



ThingWave's Industrial IoT technology provides three different communication platforms for our mote products depending on the requirements of the application:

- 6LoWPAN Mesh Network
- 5G CAT M/NB-IoT
- Wi-Fi

These solutions deliver high performance, security, robust networking, and unlimited sensing capabilities. They can be adapted to meet our customers' requirements in terms of sensing, signal processing, encapsulation, etc. The battery lifetime depends on the specific application, reaching up to 10 years for real-time monitoring applications.

The installation and integration are simple, just turn on the power and the motes will connect to the network immediately. The motes perform an automatic registration procedure and start to deliver sensor data to the ThingWave Cloud.

A common area of use of these devices are on motors, which are key pieces of equipment in a manufacturing plant or a commercial facility. By placing a ThingWave 5G vibration sensor on a motor, we can help prevent unplanned downtime caused by most common failure modes of fixed and variable-speed motors through Condition Monitoring. Vibration monitoring can detect misalignment, imbalance, looseness, bearing defects and cavitation, thus providing upcoming anomaly detection far in advance of the occurrence.

