Sense IoT

Intelligent, Powerful IoT Devices

TRUST
CONFIDENCE
QUALITY

[Technology] you can identify with

If you are in:

- Construction
- Intermodal
- Oil & Gas
- Transportation
- Mining
- Facilities Management
- Production Management

And you need help on:

- Condition Monitoring
- Container Tracking
- Worker Accountability
- Asset Management
- Fleet Monitoring
- Material Flow
- Yard Management
- Parts Replenishment
- Early Detection of Emergency

This is what you need:

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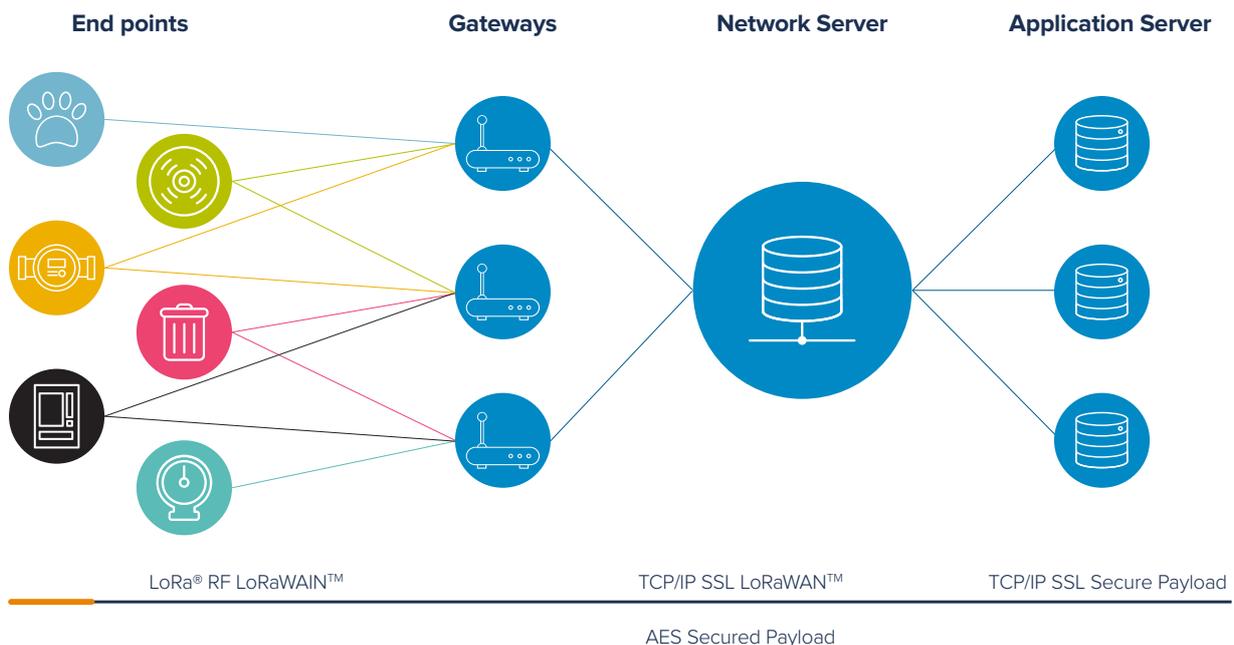
Powered by

LoRaWAN®

Sense^{IoT} LoRaWAN™ Devices

What are Sense LoRaWAN IoT devices good for?

LoRaWAN™ is a low-power IoT-focused communications technology, offering long range communications and several years of life from a compact battery-powered device. Intended for connecting remote sensors, it is perfect for high volumes of devices with low communications needs. When combined with sensors, this can provide automatic sensor status updates that can power timely actions and decisions. LoRaWAN™ combined with GPS and an accelerometer, offers position accuracy of 3–5 meters. This provides an energy efficient-solution for scalable assets or personnel tracking.

What does a LoRaWAN network consist of?

LoRaWAN™ points communicate with the physical gateways which then communicate via a cellular or IP
etwork to a cloud or locally hosted network server and then to the subsequent client application server.

End points	Gateways	Network Server	Application Server

LoRa® RF LoRaWAIN™   TCP/IP SSL LoRaWAN™   TCP/IP SSL Secure Payload

AES Secured Payload

How do Sense^IoT LoRaWAN™ devices work?

The Sense^IoT range offers a variety of IoT devices in housings suitable for different usecases, each designed with highly efficient power management features to ensure long lifespan and maximum return on investment. Tags communicate with a LoRa Gateway, which can communicate with the IoT devices over distances of up to 4 km in urban environments and as far as 15 km in flat, open space. Additional gateways can be added to supplement the capacity or range. The gateways feed their data to their assigned Network Server (which can be public or completely private) and these feed the data to the appropriate application server for processing. LoRaWAN™ operates in the international and free-to-use ISM frequency band (868 or 915 MHz), proven to be interference-free even at fully packed locations and with a high density of IoT devices. There are no interferences from/with Bluetooth or WiFi networks.

Sense loRaWAN products features:

- Very long reach, with up to 4 km in urban areas and 15 km in open field
- Long battery life of up to 5 years
- Simple sensing input
- Enhanced GPS accuracy, providing 3–5 m
- License free usage – uses same frequency bands as UHF RFID
- Minimal infrastructure requirements versus alternative technologies

Sense^IoT Asset XL

The Sense^IoT Asset device is hugely powerful and flexible thanks to the combination of GPS and LoRa technology. As a result, the device will deliver high levels of outdoor accuracy and performance over a long range. The ultra rugged construction of the device makes it suitable for a huge range of IoT and IIoT projects.

Sense^IoT Condion (with Alert Button)

The Sense^IoT Condition – Alert device harnesses the power and versatility of LoRaWAN and combines it with a push button feature to create a highly effective alerting and feedback device for indoor locations. The device is very energy efficient on the powerful battery ensuring a long life.

Sense^IoT Condition (with Laser Range Finder)

The Sense^IoT Condition – Distance harnesses the power and versatility of LoRaWan and combines it with a robust and accurate laser range finder to create a highly effective 'state change' alerting IoT device. The device is easily configurable to communicate at different intervals depending on the use case and is very energy efficient on the powerful battery ensuring a long life.

Omni-ID
Intelligent Tracking & Monitoring Devices

Visit www.omni-id.com to learn more or email sales@omni-id.com for all product or technology inquiries and we will be pleased to get in touch.

Omni-ID is the leading supplier of passive, low-profile UHF RFID solutions. Through our patented technology, Omni-ID "cracked the code" to overcome the problems traditionally associated with RFID, enabling a broad range of new applications that improve accuracy and efficiency in asset tracking, supply chain management and work-in-process. Our family of versatile RFID tags works reliably in the harshest environments, including on, off, and near metal and liquids and excels in solving tracking and identification challenges with unprecedented accuracy. With offices in the USA, UK, Asia and India backed up by a purpose-built manufacturing facility in China, our mission is to drive the widespread adoption of RFID and wider IoT technologies as the optimal tracking and identification devices.