

XENON Lite

Deploy a network of small-scale LoRa™ connected objects.



The XENON Lite is an « all-in-one » solution. It integrates a LoRa™ gateway and XENON functions in a single product to interface with your industrial IS. It allows you to simply deploy a network of small-scale connected objects without subscription. The data collected is then transmitted to industrial, local or hosted operating solutions.

BENEFITS

- > Simplified deployment due to the integration of the gateway and the Network Server
- > Ability to create a small network without infrastructure
- > Wifi hotspot available to manage and visualize the sensor network as closely as possible
- > Takes up all the advantages of XENON

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GOALS

Configure a network of LoRa™ connected objects in just a few clicks due to XENON Lite.

The frames transmitted on the LoRa network are decoded then the data is made available to local and remote applications. Data can also be processed locally.

The XENON Lite can manage a mini network of sensors or serve as a node on a larger network.

INTEGRATED FUNCTIONS

- Sensor management : integrate and configure connected sensors/actuators
- Data Application Management : manage the interpretation of output data (communication, localisation, instrumentation)
- Monitoring tables : formatting of output data (graphs, statuses, etc.)



CYBERSECURITY FUNCTIONS

The XENON solution embeds cyber security functions associated with the IIoT network :

- Denied service
- Frame redundancy monitoring
- Join Request monitoring
- Frame counter monitoring
- Possibility of deploying the IP network via VPN type tunneling
- ABP or OTAA pairing mode
- AES128 data encryption



COMPATIBILITY WITH THE MAIN WIRELESS COMMUNICATION PROTOCOLS



The **LoRaWAN® protocol** allows low-flow communication by radio of objects with low electric consumption and connected to the Internet via gateway.



The **MQTT protocol** allows data to be directly published to cloud platforms such as IBM Bluemix, Microsoft AZURE IoT or AWS IoT. Another possibility is to publish to a local data source to which the applications subscribe.



The **gateway integrates an OPC UA server** and the stored data can then be accessed by OPC UA clients from third-party applications (Scada, etc.)



The **gateway integrates a Modbus server configurable in TCP** whose registers are defined through the configuration interface. The stored data can then be accessed by Modbus clients such as PLCs, SCADA applications.



Data is sent to web applications via simple HTTP requests in JSON format, a standard for web communication protocols.



An **SNMP protocol** is a standard in the world of TCP/IP networks. An SNMP MIB is locally available.

INSTRUMENTATION

Endpoint LoRa
- ANA / TOR
- PT100 / Thermocouple K

LOCALISATION

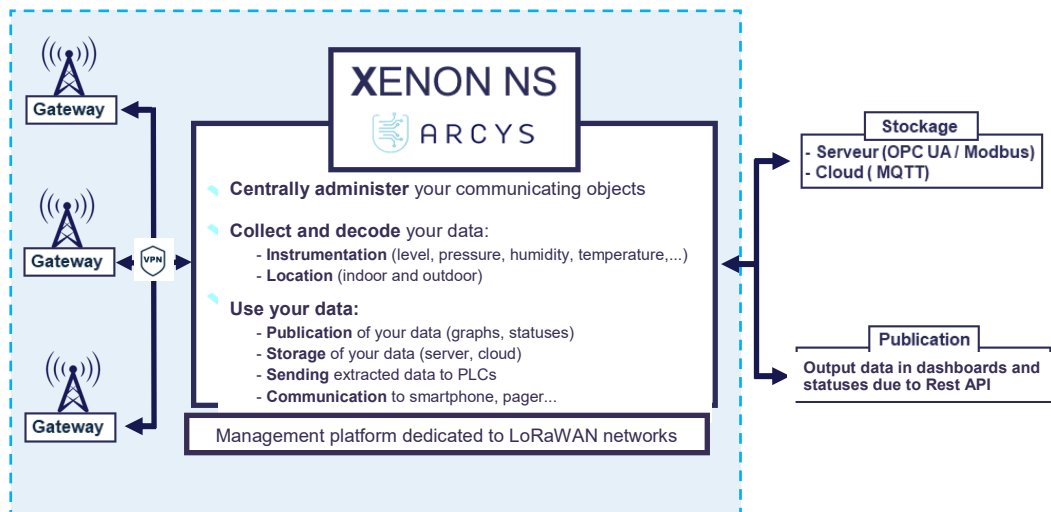
LOCATION

- INDOOR
- OUTDOOR

COMMUNICATION

Envoi d'alertes

- Smartphone
- Pager
- Mote



CONTACT

14, Place Marcel Dassault - BP 70048 - 31702 BLAGNAC CEDEX (France)

Tel. : +33(0) 5 34 36 10 00 | E-mail : sales-team@arcys.fr

