adeunis

IOT PRODUCTS & SOLUTIONS

LTE-M

NB-IoT

SMART BUILDING
CELLULAR IoT Devices

ADEUNIS CELLULAR IOT SOLUTION

COMFORT

COMFORT SERENITY

Référence : ARF8394AA COMFORT NB-IOT/LTE-M1

Référence : ARF8394AB COMFORT SERENITY NB-IOT/LTE-M1

Enhancing Comfort and Ensuring Occupant Health

Reducing Deployment, Integration, and Operational Costs

ABOUT THESE DEVICES

Worldwide cellular compatibility

Sensors connect to any available NB-IoT or LTE-M network worldwide.

Quick and Easy Configuration

Application, network, and server configuration using the Adeunis "NFC IoT Configurator" App or via an LwM2M server.

Network Coverage

Our sensors benefit from excellent indoor coverage.

Accelerated Integration

Multi-platform integration through LwM2M and MQTT protocols.
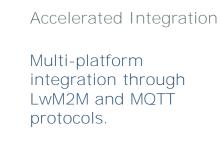
Optimized Battery Life

Over 15 years of battery life with the standard configuration.

Made in France

Devices designed and manufactured in France.

ADEUNIS-DESIGNED FOR PERFORMANCE AND AUTONOMY

Radio antenna designed and tested by our development team to ensure optimal performance without compromising on battery life

Dual battery pack with a total capacity of 8000mAh or external power supply to address all use cases

Flexible antenna connected to the motherboard to optimize PCB dimensions, allowing local and contactless product configuration through NFC technology

Radio module ensuring connectivity to NB-IoT and LTE-M networks with global coverage (B1, B2, B3, B4, B5, B8, B12, B13, B17, B18, B19, B20, B25, B26, B28, B66)

Compatibility with all Nano SIM 4FF cards

Integration of a supercapacitor to mitigate current spikes associated with radio transmissions and optimize product battery life

Enclosure designed to ensure optimal ventilation of the CO_2 and VOC sensors, thus ensuring the reliability of the measurements

Button for powering on the product

Temperature + Humidity sensor positioned away from heat sources to avoid measurement interference

Integrated LED indicator to provide product status, facilitate installation, and alert in case of battery issues
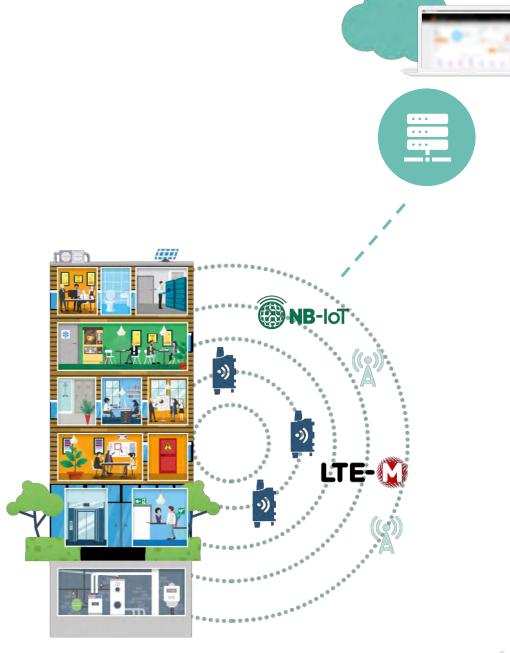
FLEXIBILITY IN OPERATING MODES AND EMBEDDED INTELLIGENCE

Customizable Configuration of Sampling and Transmission Intervals

Customize the measurement and transmission intervals according to building requirements and environmental conditions, locally via NFC using the Adeunis mobile application or remotely from a server.

- The preconfigured sampling interval is 60 minutes, allowing for continuous monitoring while preserving device autonomy.

- The sampling interval can be freely chosen between 60 and 604,800 seconds, providing a maximum period of 7 days.

- Maximize battery life by storing measurements and sending them at extended intervals when real-time data streaming is not needed.

- Choose between confirmable or non-confirmable notifications for optimal efficiency.

FLEXIBILITY IN OPERATING MODES AND EMBEDDED INTELLIGENCE
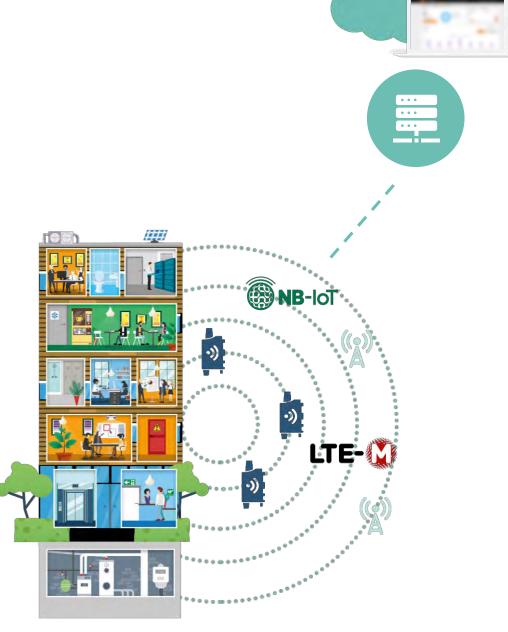
Real-Time Analysis of Collected Information

Our sensors analyze collected information in real-time and act instantly when critical measurements are detected.

CO_2 concentration exceeds recommended limits? A transmission is triggered immediately. The temperature rises abruptly? The data is sent immediately to the server.

You have full control to configure threshold rules that trigger actions.

To track trends and variations over a specific period, data can also be stored and regularly sent to a server.

This flexibility in transmission modes allows you to maximize operational efficiency, optimize product lifespan, and take proactive measures when critical thresholds are exceeded.

OVER 15 YEARS OF AUTONOMY

COMFORT Device connected to a NB-IoT network

Sampling Period	Transmission Period	Autonomy Good network (years)	Autonomy Bad network (years)
Every 10 minutes	Every 10 minutes	>15	<1
Every 10 minutes	Every hour (historisation)	>15	3,4
Every hour (default device configuration)	Every hour (default device configuration)	>15	3,4
Every hour	Every 6 hours (historisation)	>15	>15

PRODUCTS DESIGNED FOR LARGE-SCALE DEPLOYMENTS

CONFIGURATION OF APPLICATION PARAMETERS

You can pre-configure your sensor using the Adeunis NFC IoT Configurator mobile App via NFC.

If you prefer not to configure each device individually, you can take advantage of the custom pre-configuration performed by our experts before delivery.

Once your sensor is installed, you can change its configuration from a central server.

No need to manually configure each device individually; you can quickly and efficiently deploy your configurations.

MONITORING

Automate real-time monitoring of your fleet's status.

Easily set up status notifications and alarms that indicate which devices are offline, approaching low battery levels, or transmitting weak signals.

This enables you to implement proactive maintenance to avoid unexpected downtime and reduce costs associated with manual sensor administration.

FIRMWARE UPDATE

Remotely update the application firmware of your Adeunis sensors (Firmware Over-The-Air or FOTA) seamlessly and in just a few minutes.

Deploy new features, enhance security, and effortlessly apply bug fixes.

PARTNER DEVICE MANAGEMENT PLATFORMS

We have tested the integration of our sensors with several market-leading device management platforms
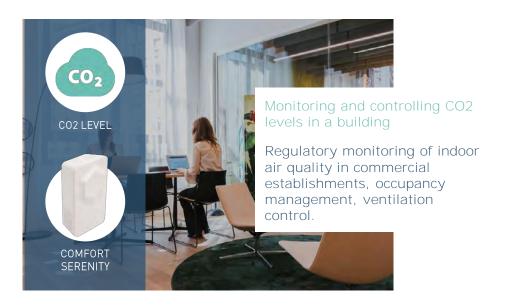

These integration tests ensure optimal compatibility and interoperability between our Adeunis cellular IoT sensors and these Device Management platforms.

POPULAR USE CASES

CO2 LEVEL

COMFORT SERENITY

Monitoring and controlling CO2 levels in a building

Regulatory monitoring of indoor air quality in commercial establishments, occupancy management, ventilation control.

IAQ

COMFORT SERENITY

Ensuring good indoor air quality

Managing health risks, ensuring user comfort, complying with legal obligations.

HUMIDITY

COMFORT

Monitoring and controlling humidity in a building

Occupant comfort and health, monitoring storage conditions, preservation of assets, preservation of the building structure.

TEMPERATURE

COMFORT SERENITY

Analyzing environmental factors and adjusting the use of heating, air conditioning, and ventilation

Controlling humidity levels to adjust the operation of the ventilation system, analyzing ambient temperature to regulate the use of centralized heating.

adeunis

IOT PRODUCTS & SOLUTIONS

283 rue Louis Néel - Parc Technologique Pré Roux
38920 Crolles – France

Sales department : +33 (0) 4 76 92 07 77

Reception / Administration : +33 (0) 4 76 92 01 62

www.adeunis.com