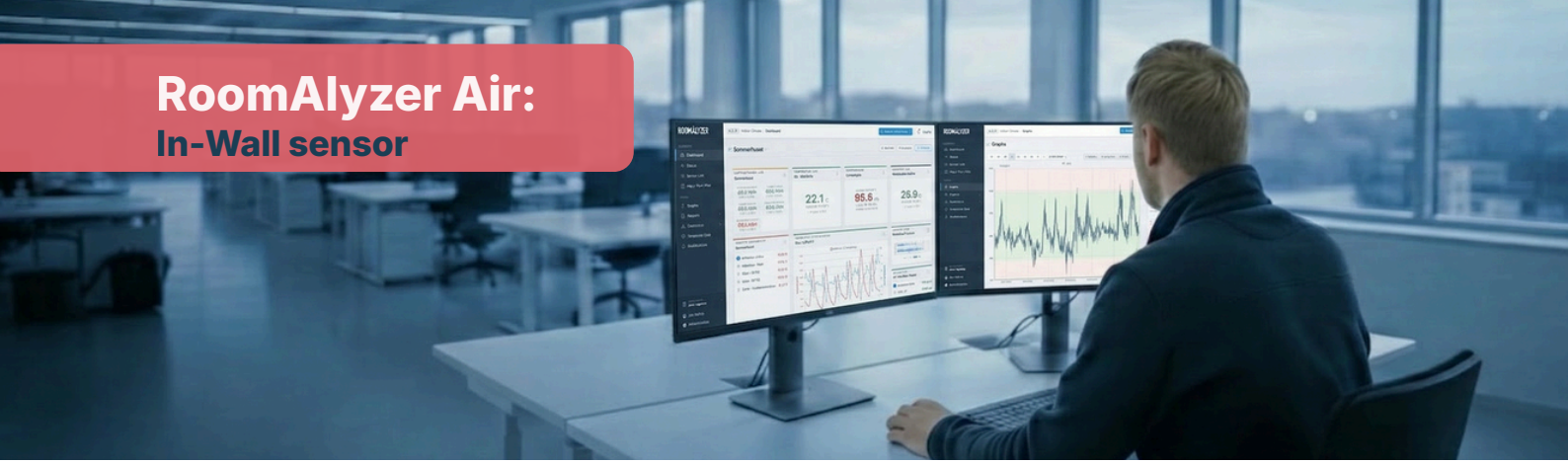


RoomAlyzer Air:
In-Wall sensor

Precise monitoring of the climate inside walls.

In-Wall sensor

Measurement of temperature and humidity

In-Wall sensor
Dimensions: H39 x W62 x L128 mm

The In-Wall sensor measures temperature and humidity directly inside the wall. The probe is placed in the masonry, in cavities or behind cladding, while the sensor housing sits discreetly on the wall. This gives you insight into what is normally hidden: moisture build-up, condensation and temperature conditions within the structure itself. This data in the RoomAlyzer platform enables you to detect moisture problems early, document the building's condition and prevent damage before it becomes visible. The sensor transmits data via the closed NB-IoT network – independent of your local IT infrastructure and even through thick walls.

Your three core benefits:

- Early detection of moisture in the structure: By measuring directly inside the wall, you see moisture and condensation long before they appear as stains, flaking or odour. This gives you time to act before the damage becomes extensive and costly to repair.
- Intelligent mould prevention: Temperature and humidity inside the wall show exactly where and when there is a risk of mould growth. You can target drying, ventilation or renovation where it is needed – before it threatens the building fabric or the wellbeing of the users.
- Discreet installation with the probe in the wall: The white sensor, about the size of our Mini+ and Full+, is mounted with tape or screws. With a 1 m cable, the probe is placed in masonry, cavities or behind cladding, while the sensor housing stays easily accessible for battery replacement.

RoomAlyzer: The intelligent brain behind your sensors

Our platform transforms measured values into active property protection, wellbeing, and safety. We combine years of experience with intelligent algorithms that secure your operations and preserve value.



Follow the climate inside the wall in real time:
RoomAlyzer shows the measurements from the wall side by side with the indoor climate in the room. This provides unique insights into the building's moisture balance and the condition of the structure.



Round-the-clock prevention:
An automatic early warning system via email and SMS informs you immediately if moisture or low temperatures inside the wall increase the risk of condensation and mould.



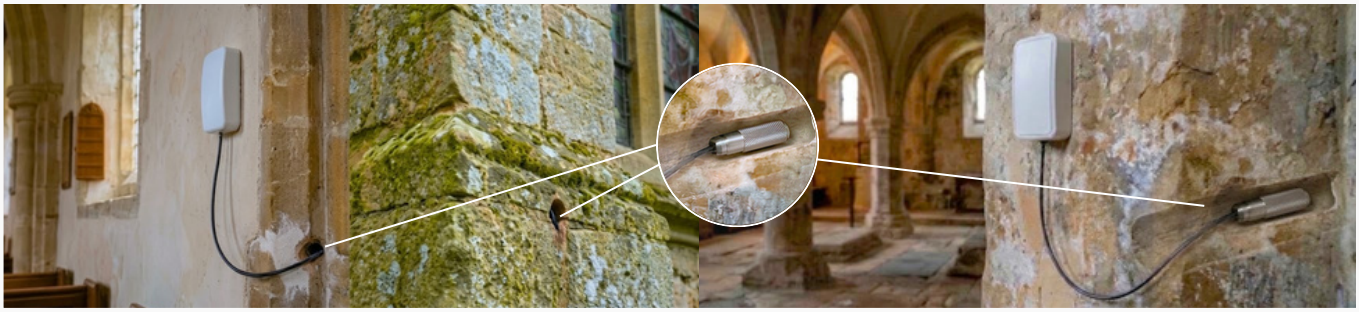
Automated documentation and AI:
You receive clear analyses and concrete recommendations for action based on how moisture and temperature inside the wall develop over time. This guarantees fact-based and future-proof operation.

IoT Fabrikken

RoomAlyzer:
In-Wall sensor

Your advantages with a simple and secure system:

Function	RoomAlyzer-advantage	Your benefit
Communication	NB-IoT: Direct cellular connection.	Simple installation and a stable signal – even through thick walls.
Operation	Up to 8 years of battery life.	Minimal maintenance requirements – ideal for measuring points that are hard to reach.
Measurements	Precise temperature and humidity recording via probe.	Provides insight into moisture and temperature inside the structure itself.
System integration	Open REST API, webhooks, and MCP for AI agents.	Future-proof solution that communicates seamlessly with your existing systems.
Data security	Full end-to-end encryption (AES-128) and 100% EU-based data hosting.	Ensures full data ownership and simplifies your risk analysis with regard to NIS2.
Personal data & GDPR	Exclusively technical measurement data without personally identifiable information.	Minimal administrative effort, as complex GDPR requirements do not apply to the measurements.



Technical specifications:

Sensors:	Temperature and humidity (1 m probe as standard)
Measuring range:	(probe): Temperature: -40 to +125°C / Humidity: 0–99% RH
Operating range:	Temperature: -35 to +70°C
Precision:	Temperature ±0.4°C / Humidity ±3% RH
Communication:	NB-IoT (Narrow Band Internet of Things)
Activation:	Ready to use upon delivery (plug-and-play)
Control software:	Web application and mobile app (iOS/Android)
Open API:	Easy integration into third-party systems
Battery:	Up to 8 years. Replaceable pack (3 x AA lithium, 6,300 mAh)
Mounting:	Tape or screws
Dimensions:	H39 x W62 x L128 mm
Weight:	130 g
Material:	White ABS plastic (robust and weather-resistant)
Application:	Inside walls and cavities
Certification:	CE and IP65 certified (withstands rain and snow)

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