

Wireless Continuous Monitoring Corrosion Under Insulation Sensors and Data Solutions

INDUSENZ INVENIO RH-2 CUI SENSOR

The **INDUSENZ INVENIO RH-2 CUI SENSOR** is designed for retrofit and many other options of installation in insulated pipes and equipment for monitoring **Corrosion Under Insulation (CUI)**.

The **INDUSENZ INVENIO RH-2 CUI SENSOR** continuously monitors relative humidity and temperature and transmits this data via LoRaWAN to the nearest available network. The measurements are then securely relayed to the **INDUSENZ INVENIO CLOUD** for storage, analysis, and visualization.



INDUSENZ INVENIO RH-2 Specifications

Temperature range	-20°C to 100°C	Ex certification	ATEX/IECEx intrinsically safe, zone 0, gas group IIC, temp class T4
Ingress Protection	IPX7	Lifetime	Typical 10 years @ 1-hour sampling interval (non-extreme climatic conditions)
Typical temperature accuracy	±0.2°C		
Typical RH measurement accuracy	±2%	Communication interface	RF - 915 MHz (RH-2A for US/AU) RF - 868 MHz (RH-2B for EU)
Power	Battery cell	Radio protocol	LoRaWAN®
Weight	25g	LoRaWAN® device activation	OTAA (Over The Air Activation)

Get in touch!

Let's discuss your CUI monitoring needs

INDUSENZ INVENIO CLOUD

The solution includes a CUI monitoring dashboard which enables a higher-level visualization of the current and historical water wetting state. This means that the user has an overview of the state of the entire asset, with the possibility to highlight best/worst case areas, and to drill down into these areas to see which parts of the respective areas are affected, and for how long. The user can focus more on the risk domain, and less on interpreting raw data from the sensors.

Top-down approach: A top-level overview provides insights to overall conditions as well as the option to drill further down into details, with customizable metadata fields and filtering supporting customer-specific needs. The system outputs the Probability of Failure related to the water-wetting barrier of the instrumented equipment.

Federated authentication: The system can be set up with end-user login through the customer's own Identity provider via OpenID Connect (OIDC).

API: The system offers HTTP API access to data, with industry standard OAuth 2.0 authorization. Indusenz provides API documentation conforming to the OpenAPI v3.0 specification, along with integration guides for developers.



Get in touch!
Let's discuss your CUI monitoring needs