

Mimic Components: In-House Article
Subject: Monitor with Climate Air+ Solution

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Monitor with Climate Air+ Solution

The Climate Air+ Solution is a comprehensive, high-precision environmental monitoring system for wireless sensor temperature and humidity control communications.

Designed with industrial-grade reliability, the system integrates the RHT Air+ wireless sensor and the AirGate Air+ gateway devices to ensure continuous, compliant, and scalable data acquisition across complex infrastructures such as pharmaceutical and data centre storage facilities, and industrial processing applications.

Utilizing LoRa-based long-range wireless communication, the system offers robust connectivity across extended environments, while proprietary encryption protocols safeguard data integrity, to ensure regulatory compliance with standards such as FDA 21 CFR Part 11.

Each *RHT Air+ sensor* delivers high-accuracy measurements (±0.2°C, ±1.5% RH). It also features configurable sampling intervals, and supports autonomous data logging with a memory capacity of 15,000 records. The 2-year battery life and IP65-rated housing offer long-term installation with minimal maintenance.

The AirGate Air+ gateway instrument can consolidate data from up to 32 RHT Air+ devices. It further supports a communication range of up to 3 km (open field) and stores up to 480,000 records with redundancy. The industrial communication protocols include MQTT, Modbus-TCP, and NTP, enabling seamless integration into SCADA systems, BMS platforms, or cloud-based analytics via the NOVUS Cloud interface.

This type of solution allows for precise environmental mapping across distributed points in logistics hubs, cold chain assets, and GMP-compliant manufacturing zones, so that thermal and humidity parameters remain within validated ranges. Typical sensor placement applications include thermal-sensitive zones within cold storage rooms as well as fermentation and barrel room monitoring during wine processing, to name a few.

Overall, the Climate Air+ Solution offers a scalable and secure platform as an environmental monitoring system to ensure product quality. It also provides audit readiness data, keeping in line with global compliance mandates.

Call the Mimic branches for more information.

JHB Branch

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