

Healthy Indoor Air Monitoring at a Business Center with IoT Sensor Solutions

Combining advanced LoRaWAN® sensors with local installation expertise to deliver a scalable and reliable IAQ monitoring solution.

Belmopán, Belize

Milesight Partner
BMSys Building Management Systems S.A

Location
Belmopán, Belize

Applications
Indoor Air Quality Monitoring

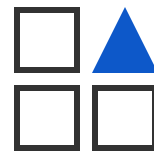
Related Product
24*AM319, 3*UG65

Background

Maintaining healthy and comfortable indoor environments is essential for modern commercial buildings. To gain better visibility into air quality and environmental conditions, the David L. McKoy Business Center sought a centralized monitoring solution that could collect data across multiple areas while supporting easy deployment and future expansion.



Challenges



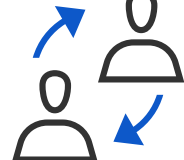
Complex Multi-Parameter Monitoring

Tracking multiple indoor environmental variables across different areas without increasing installation burden.



Flexible Wireless Deployment

Minimizing cabling and enabling future expansion while maintaining reliable performance.

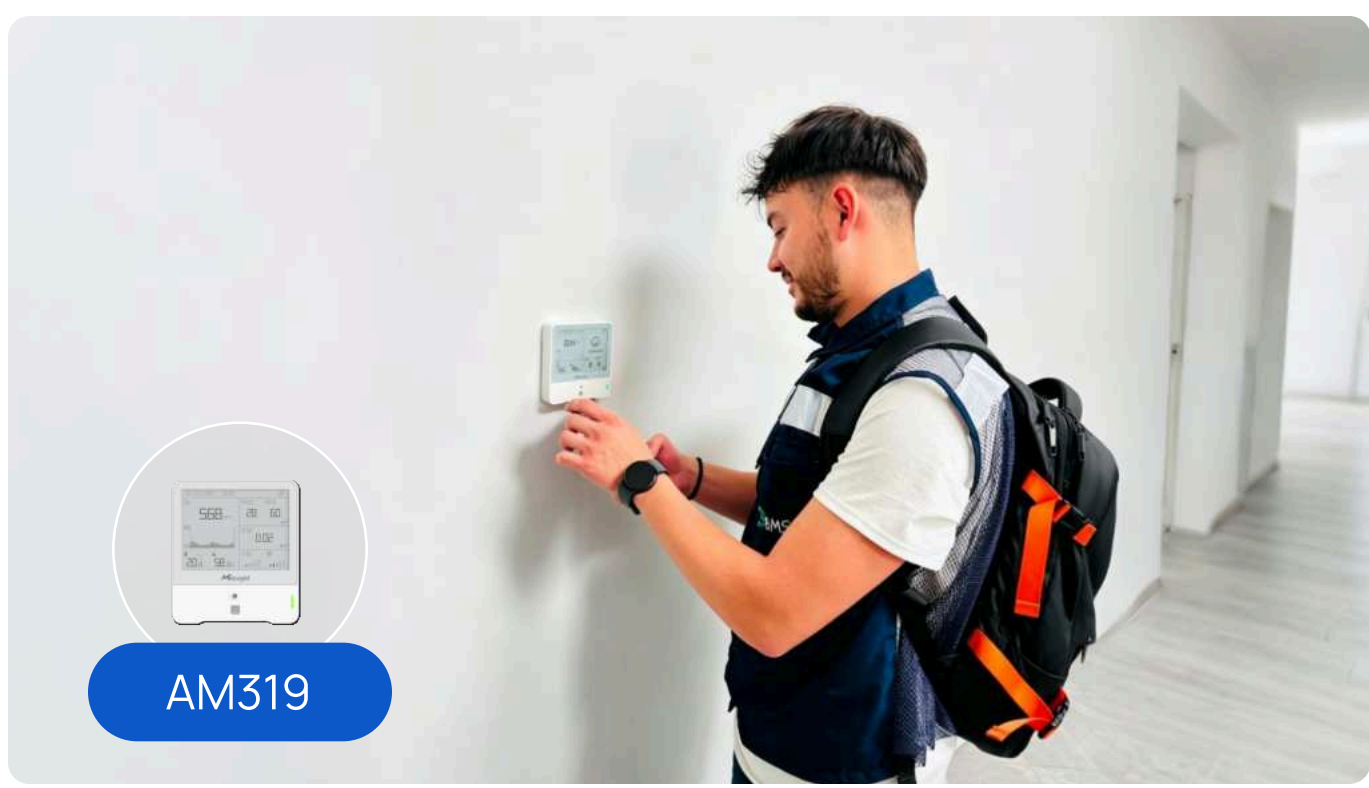
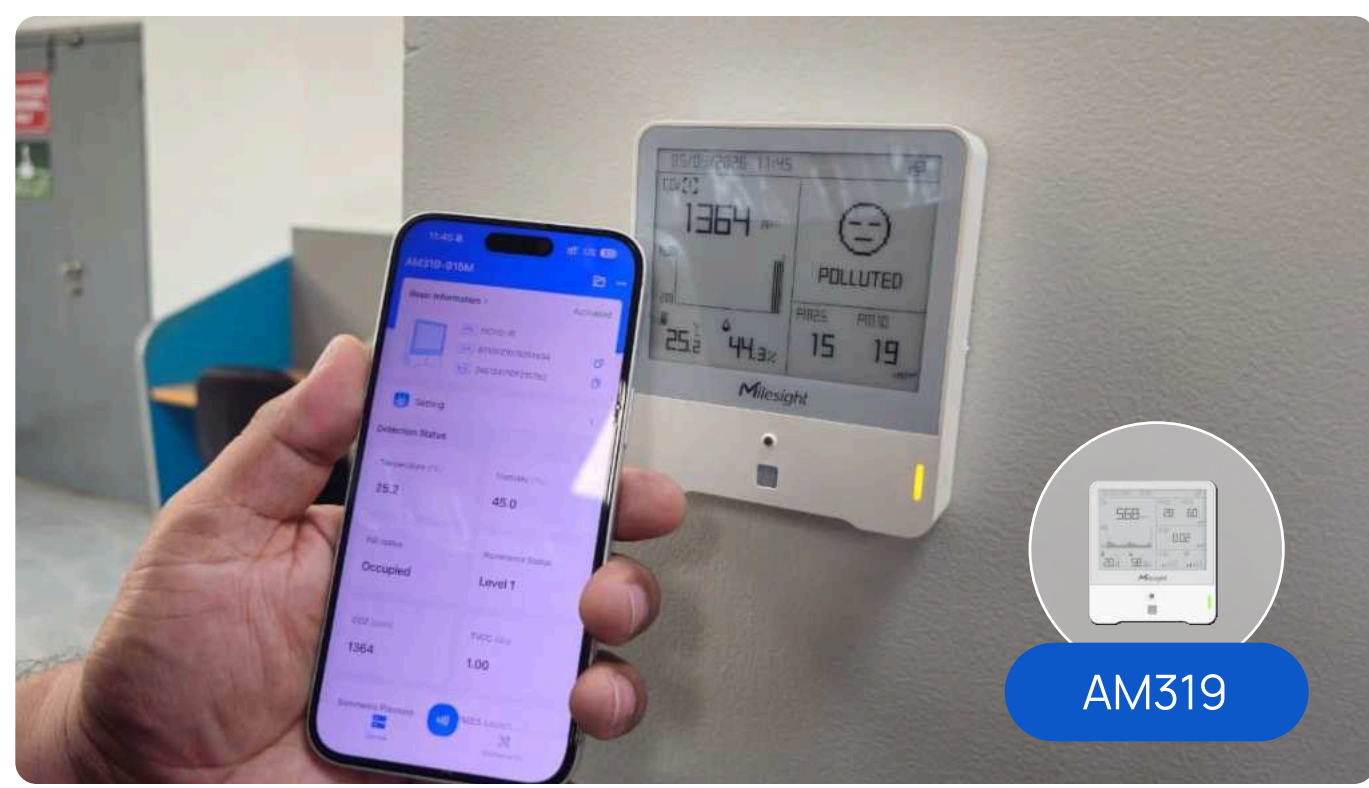
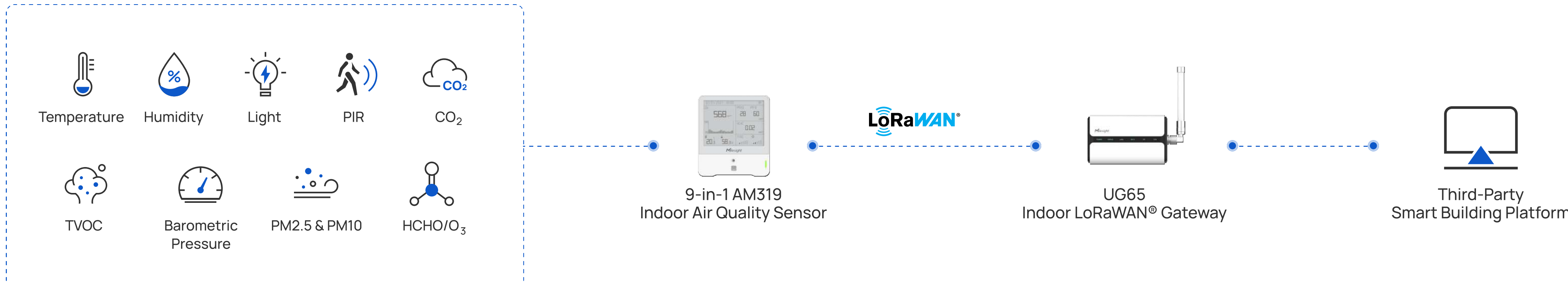


Cross-Regional Coordination

Aligning local installers and regional engineers to ensure smooth configuration, network validation, and commissioning.

Solution

Milesight AM319 sensors are deployed on multiple indoor areas to monitor such as temperature, humidity, CO₂, TVOC, light, motion, barometric pressure and other key parameters. Data is transmitted via UG65 LoRaWAN® gateways and delivered to a 3-party smart building platform for centralized, real-time monitoring and analysis.



Results

Centralized Indoor Air Quality Monitoring

Building operators can now continuously monitor key air quality and ambience parameters through a centralized system, enabling more informed operational decisions.

Improved Occupant Comfort and Well-Being

Real-time environmental data supports: better ventilation management, enhanced occupant comfort, faster identification of abnormal conditions, more proactive facility management, and scalable smart building infrastructure.

Scalable Smart Building Infrastructure

The LoRaWAN-based architecture provides a flexible foundation for future expansion, allowing additional sensors and smart building applications to be integrated with minimal effort.

Simplified Deployment and Lower Infrastructure Requirements

By leveraging wireless communication, the solution significantly reduced installation complexity and avoided the need for extensive cabling throughout the facility.

Discover More about Milesight Products

AM300 Series
Indoor Air Quality Sensor

UG65
Indoor LoRaWAN® Gateway

Why Choose Milesight



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“The solution provides us with a practical and scalable way to monitor indoor air quality across our facilities. The wireless deployment makes the system easier to implement, and the information collected by the sensors will help us better understand the conditions inside the building.”
From a project execution perspective, Milesight devices are practical to configure, scalable for future expansion, and well aligned with the needs of smart building and indoor air quality monitoring projects. Their competitive price and robust functionality make them a valuable option for customers looking to implement IoT solutions without adding unnecessary complexity.

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Partner

About BMSys Building Management Systems S.A

BMSys Building Management Systems S.A. is a Costa Rica-based technology solutions company specialized in building management systems, IoT solutions, smart building technologies, energy monitoring, automation, and system integration.

Although headquartered in Costa Rica, BMSys has the technical capability to support regional deployments across Central America and the Caribbean. The company provides engineering, technical consulting, device configuration, commissioning, on-site support, and remote assistance for projects involving building automation, environmental monitoring, LoRaWAN networks, and smart infrastructure.



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