

# Next-Gen Building Empowerment: Architecting Scalable Smart Building Solutions

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Explore the transformative journey of building development and the rise of smart technologies.

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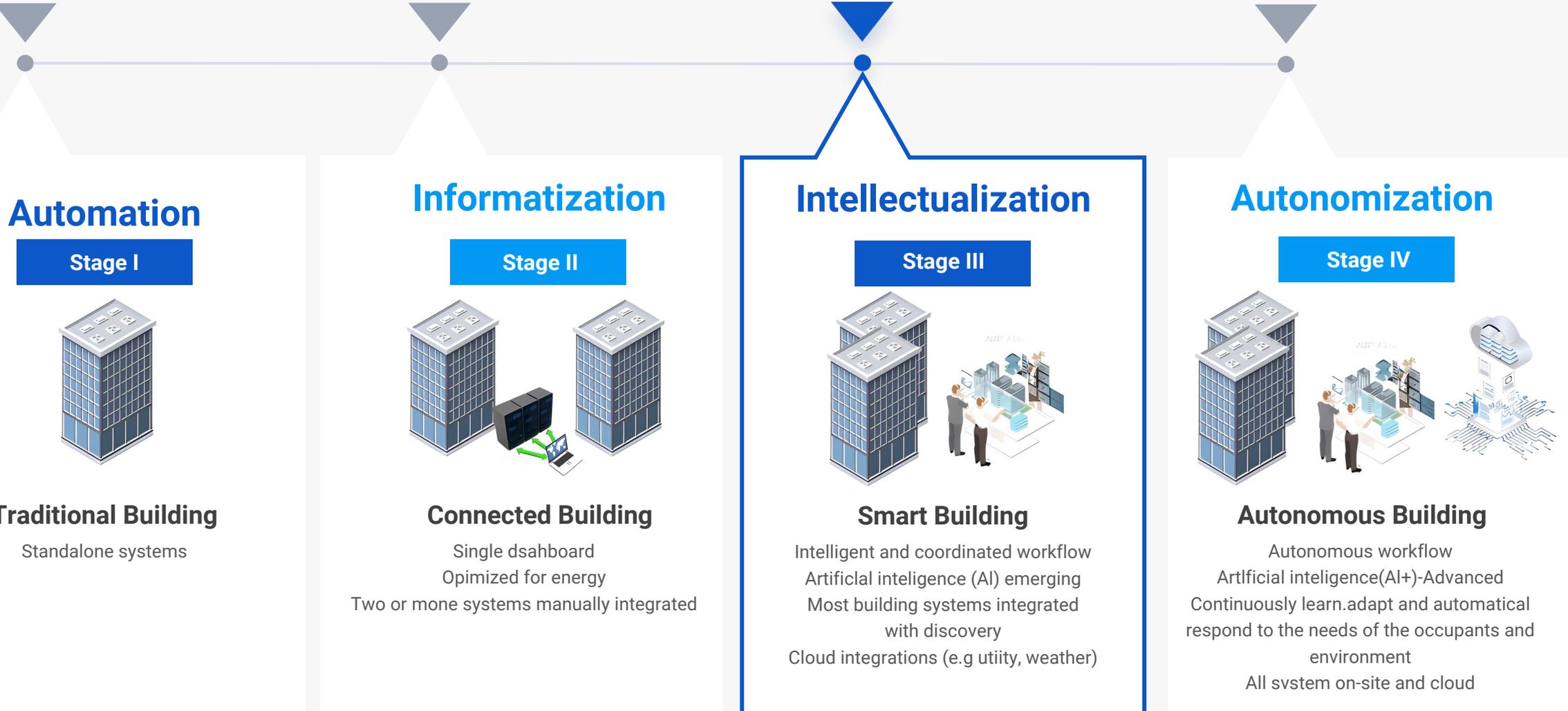
Understand how the Milesight ecosystem works and its proven impact

# 01

## Evolution of Building Development

Explore the transformative journey of building development and the rise of smart technologies.

# Developing Stage of Smart Buildings



## Automation

Stage I

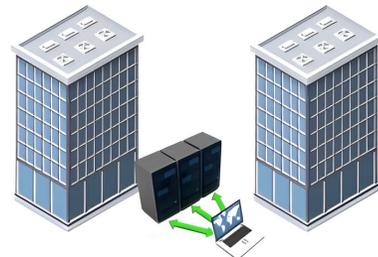


### Traditional Building

Standalone systems

## Informatization

Stage II

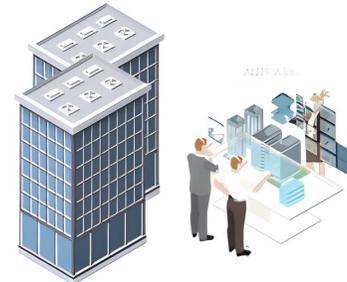


### Connected Building

Single dashboard  
Optimized for energy  
Two or more systems manually integrated

## Intellectualization

Stage III

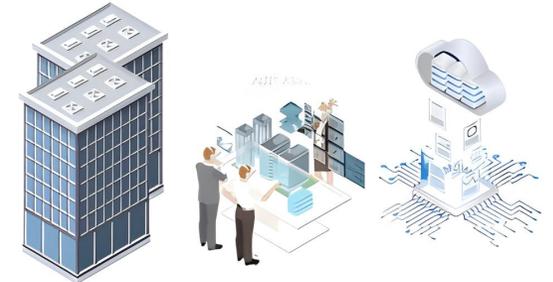


### Smart Building

Intelligent and coordinated workflow  
Artificial intelligence (AI) emerging  
Most building systems integrated with discovery  
Cloud integrations (e.g utility, weather)

## Autonomization

Stage IV



### Autonomous Building

Autonomous workflow  
Artificial intelligence(AI+)-Advanced  
Continuously learn, adapt and automatical respond to the needs of the occupants and environment  
All system on-site and cloud

# What is Needed for IoT in Smart Buildings Construction

## Easy Installation Devices:

Non-invasive setup that is quick to deploy, minimizing disruption and reducing installation costs.

## Rich Sensing Data:

Rich and accurate data from more dimensions collection and analysis.

## Seamless Integration Solution:

Superior compatibility to ensure smooth interoperability with existing systems and technologies.



Reliable Wireless Technology



Professional Sensing Devices



Well-established Sensing Solution

# 02 Reliable Wireless Technology

The Ideal Technology for Smart Building Connectivity

Discover the advantages of LoRaWAN in enabling efficient, scalable, and cost-effective IoT solutions



# LoRaWAN is a Strong Choice for Smart Building Applications

**Long-Range Communication:** Covers large areas within buildings and can penetrate walls and floors, making it ideal for multi-story structures.

**Low Cost:** License-free and Cost-Free ISM Bands.

**Effortless Installation:** Battery-powered with wireless communication, eliminating the need for wiring.

**Energy Efficient:** Delivers up to 10 years of battery life.

**High Connectivity:** A single gateway supports connections for thousands of devices.

**Enhanced Security:** Features robust encryption, advanced authentication, trusted algorithms, and private network support.

**Expansive Ecosystem:** LoRaWAN, backed by the LoRa Alliance, is widely adopted and supported by leading industry players, fostering a strong and growing ecosystem.

\* LoRaWAN technology is rapidly advancing, driven by increasing global adoption, expanding network coverage, and its ability to provide scalable, low-power IoT connectivity for smart buildings, cities, and industries.

# 03

## Introducing Milesight: A Leader in IoT Innovation

Learn about Milesight's commitment to delivering cutting-edge wireless sensing devices and solutions

## ABOUT MILESIGHT

Milesight offers multi-potential sensing products that accurately capture the most relevant and significant data for a growing variety of needs and applications.

Across AI, 5G, IoT, and other forward-thinking technologies, we innovatively extend the technological potential to unique niches and scenarios. With a keen perception of data value, we prioritize adaptive agility to quickly respond to customer-specific challenges and deliver safety, efficiency, and business insights.

In collaboration with a diverse partner ecosystem, we are committed to realizing data value and making real and positive impacts in the fields of smart building, intelligent traffic, intelligent security, smart city, and beyond.



**74.76%+**

CAGR



SENSING

**56%**

R&D Team



**2000+**

Distributors and Partners



**120+**

Countries and Regions



**1,000,000+**

Milesight Devices Deployed  
Globally

# RICH PRODUCT LINEUP

## Sensing Nodes



Indoor Air Quality



Occupancy & People Counting



Temp.&Humi. Detection



Energy Efficiency Control & Monitoring



Environmental Sensing



Distance Detection



Water Leak Detection



LoRa® Controllers



IoT Weather Station

## Connection



LoRaWAN® Gateway



Industrial Cellular Routers



5G Suit

## Vertical Industries



Smart Building



Smart Retail



Smart Agriculture



Smart City



Cold Chain & Logistic



Smart Industry



Milesight IoT Cloud



DeviceHub



Milesight VPN



Milesight Development Platform

# MILESIGHT SENSING PRODUCTS EMPOWERED SMART BUILDINGS

The three main modules in Buildings are the core, and People Sensing empowers, creating a differentiated advantage.



## Facility Management

Facility Protection & Maintenance

Efficiently Management

Meter Retrofits

Smart Restroom Management



## Energy Management

HVAC Management

Lighting Management

Energy Monitoring & Management



## Space Management

Environmental Comfort Improvement

Office/Workspace Space Management

Smart Restroom Comfort

People Caring

Human Well-being Certification Assistance

## Efficient Management

### Centralized HVAC Control



WT Series

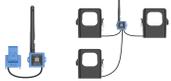
### Centralized Lighting Control



WS Series

## Facility Protection & Maintenance

### Power Status Monitoring



CT Series

### HVAC Performance Monitoring



WT Series

IAQ Series

### HVAC Pipe Monitoring



TS Series

EM Series

## Restroom Management

### Restroom Cleaning Schedule Management



People Sensing



WS Series

### Restroom Supplies Management



WS Series



EM Series

## Meter Upgrades

### Remote Metering



EM300-DI



UC Series



# ENERGY MANAGEMENT

## HVAC Management

Unified Manual Dispatch & Local Automation Adjustment



WT Series

Data-Driven Control: Real-Time Local Interaction



IAQ&WS Series

VS Series

Data-Driven Control: Energy-Saving Strategy Optimization



CT Series

TS Series

EM Series

## Lighting Management

Smart Lighting Control



WS Series

Restroom Supplies Management



VS Series

## Energy Monitoring

Data-Driven Control: Real-Time Local Interaction



WS Series

Data-Driven Control: Energy-Saving Strategy Optimization



WS Series

CT Series



## Environmental Comfort

### Temperature and Humidity Control



IAQ&EM Series



WT Series



VS Series

### Noise Monitoring



WS302

### (E-)Cigarette Detection



GS601

NEW

## Workspace Management

### Space Optimization



VS&DS Series

### Footfall Monitoring



VS Series

### Sanitation Management



VS Series



## People Caring

### Human Comfort & Safety



NEW

VS373  
Fall Detection

## Smart Restroom Comfort

### Restroom Air Quality Management



GS301

### User Satisfaction Management

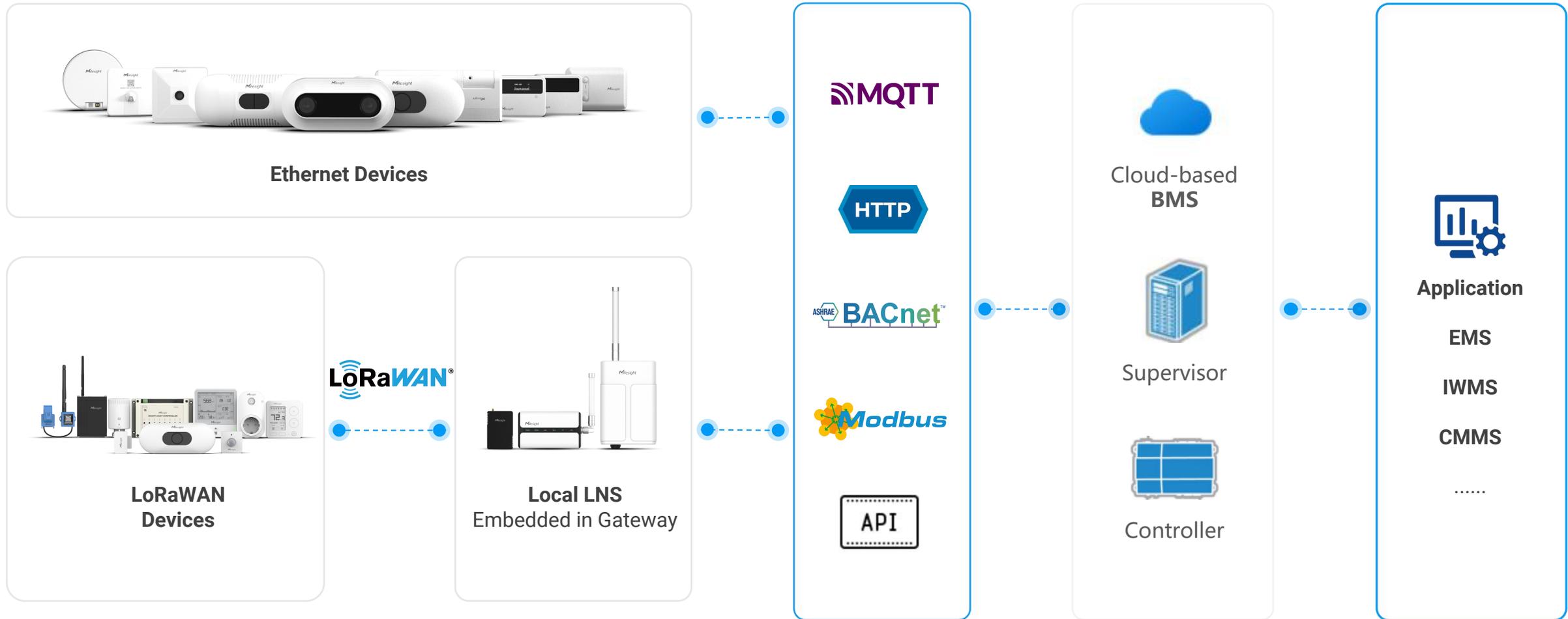


VS350



Display

# SMOOTH INTEGRATION IN SMART BUILDING



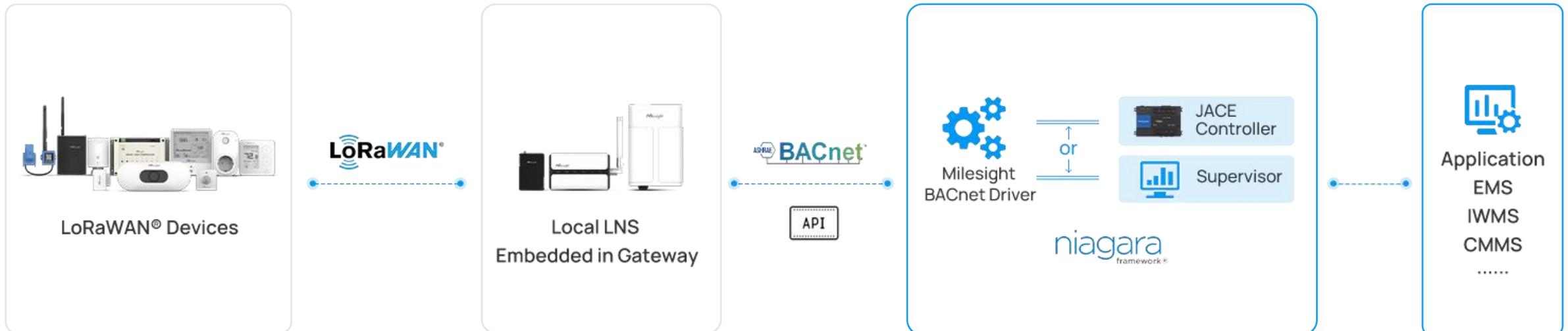
# SEAMLESS INTEGRATION WITH NIAGARA

## Empower Smart Buildings with Effortless LoRaWAN Gateways Integration in Niagara

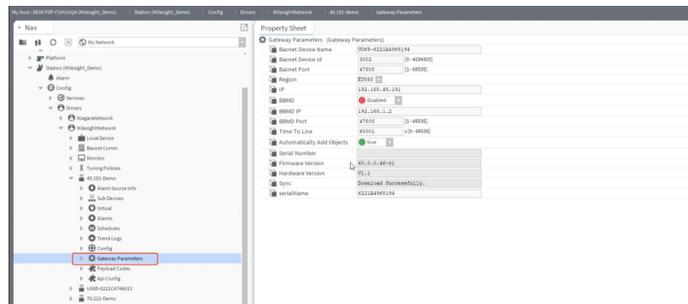
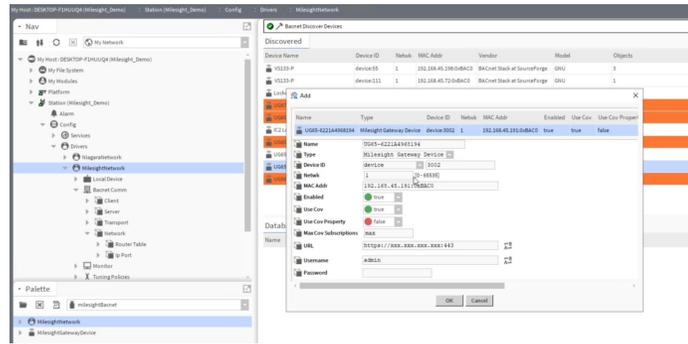
Milesight BACent Driver for seamlessly integration between Milesight devices with Niagara or Niagara-based BMS.

### Key Benefits

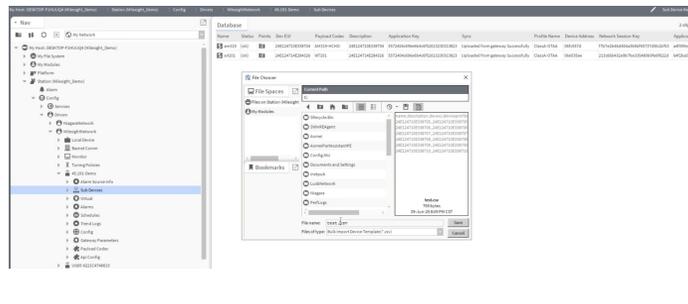
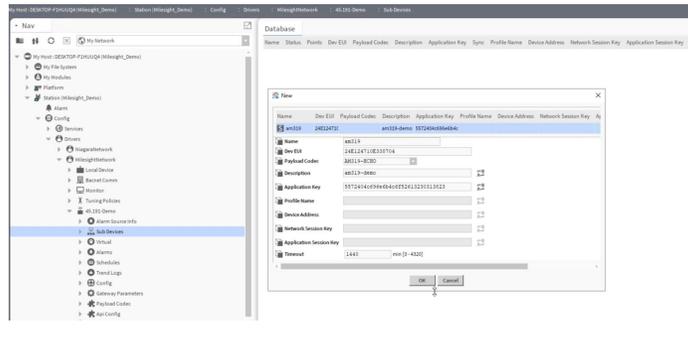
- Effortless Integration, No Extra Coding
- Unified Configuration in Niagara Workbench
- License-Free, Lower Project Costs
- Easy Expansion and Maintenance



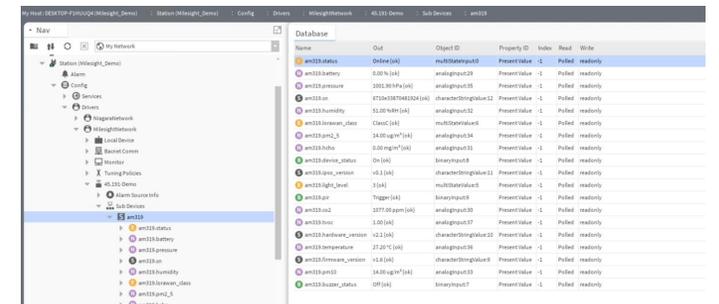
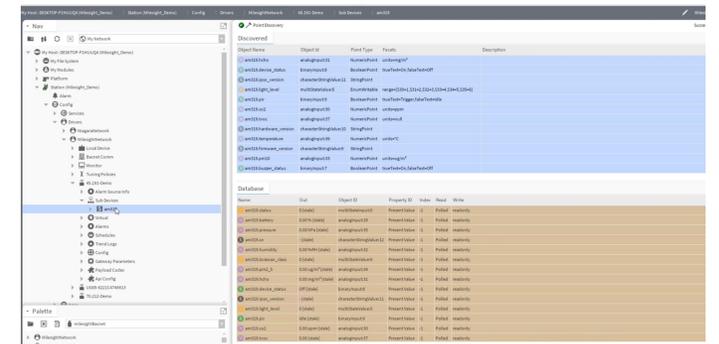
# SEAMLESS INTEGRATION WITH NIAGARA



Milesight Gateway Adding and Setting



Milesight Sensor Adding and Bulk Importing



Data Points Discovering and Loading

## New to LoRaWAN? No Problem!

One-stop operation in Application as usual



### Software

- Plug and play
- Fast adding devices in bulk
- Automatically readable data
- Compliant to rich protocols, BACNET, MODBUS (RTU/TCP), KNX, MQTT, HTTP, HTTPS
- Supports docker



### Hardware

- Edge Gateway, combination of traditional controller and LoRaWAN gateway.
- Rich interfaces (e.g. RS485, I/O, Ethernet, MBus, etc.)



Building IoT Gateway



**Position**  
Trieste, Italy

**Milesight Partner**  
OpenSense

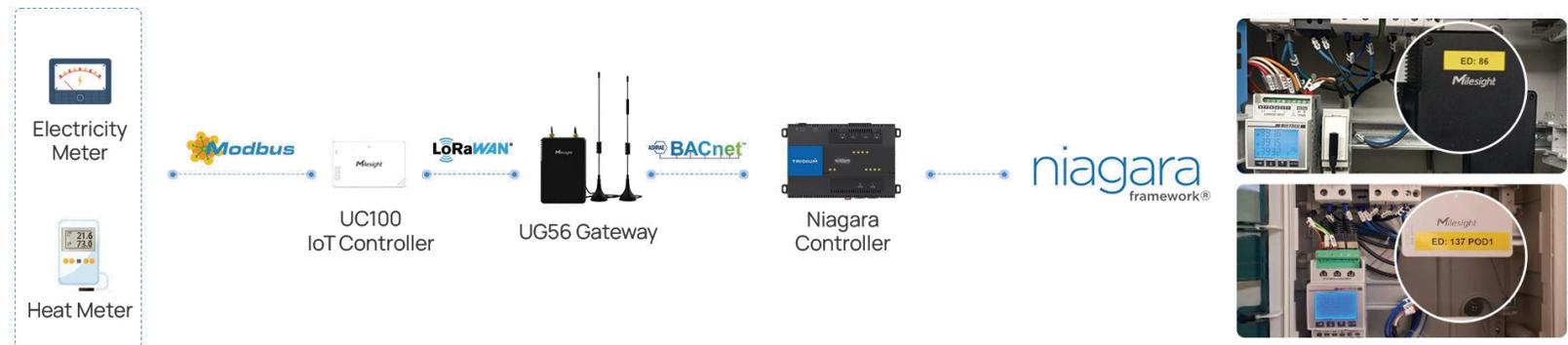
**Background & Challenges**  
Over 100 existing residential buildings needed an electricity and heat consumption monitoring system. These buildings are residential condominiums where hundreds of people live, so it was not possible to carry out cabling and building work.

## Heat and Energy Consumption Monitoring over 100 Residential Buildings in Italy

Applied Products	Installation location	Results
UC100-868M	Meter Box (Electricity Meter & Heat Meter)	The UC100 IoT Controller collects data via Modbus from the field instruments in mechanical rooms and boiler rooms
UG56-868M	Meter Box	Given that Milesight UG56 Industrial LoRaWAN® Gateway supports for BACnet/IP to integrate into existing Building Management System (BMS).

**Benefits**

Easy intergration with BMS using BACnet and allows the rea-time monitoring without interruption. The smart transformation has accelarated its ability with centralizd platform.





## Position

Ontario, Canada



## Milesight Partner

Peak Power



## Background & Challenges

- Poor Signal
- Excess Maintenance
- Extra Expense

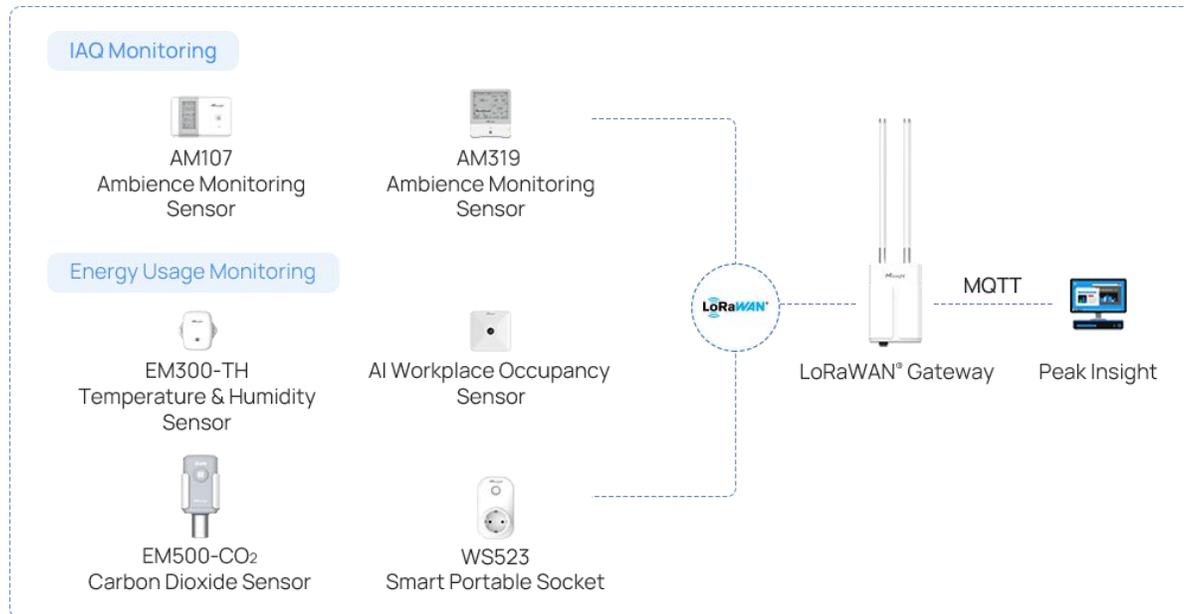
## Milesight 4,400 Sensors Energize 62 Energy Efficient and Comfortable Buildings in Canada \$250,000 Saved each Quarter

Milesight's partner, Peak Power, is a Canadian cleantech pioneer revolutionizing energy management by integrating battery storage, grid-interactive buildings, and bi-directional EVs into a single decarbonization platform to drive net-zero goals and financial benefits.



## Benefits

Data-Driven Analyses / Accurate Insights / Remote and Automated Management / Superior Indoor Air Quality / Energy-efficient and Eco-friendly Building





 **Position**  
Quebec, Canada

 **Milesight Partner**  
Thingsfactory

 **Background & Challenges**

Preventing water leak damages in a 38-story building in a traditional way is challenging. Water leakages could go unnoticed until it's too late, causing significant damage to the property. According to the insurance industry, water damage claims are one of the most frequent and expensive types of claims filed by property owners in the last 5 years.

## Real-Time Water Leakage Monitoring System with more than 1,300 devices for a 38-Story Condominium and Rental Building in Canada

Thingsfactory is an Internet of Things (IoT) and Artificial Intelligence (AI) product development company specializing in real-time monitoring and data collection for critical systems to prevent losses.

### Benefits

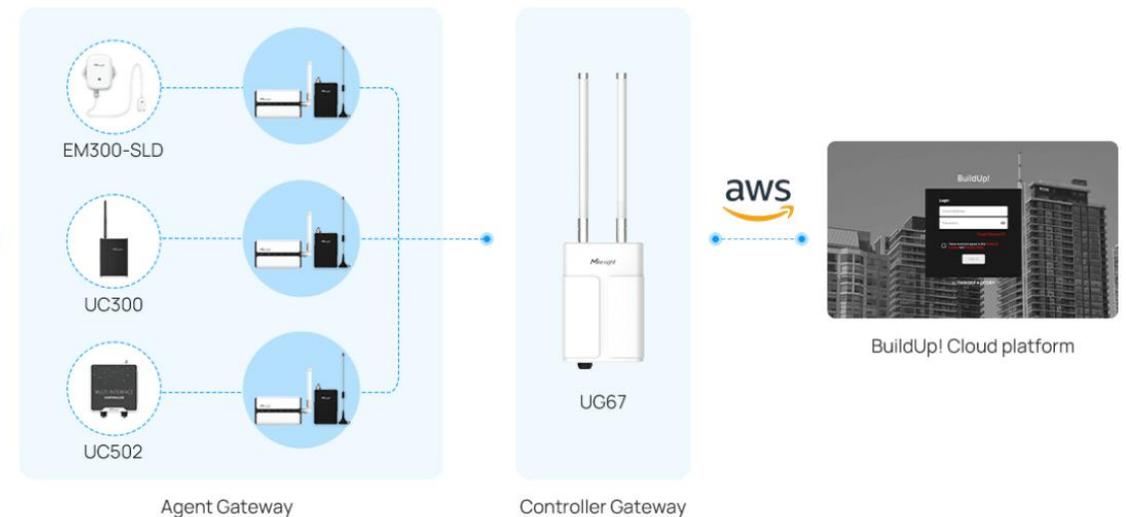
Decrease in Property Losses; Getting Informed in Real-Time; Data-Driven Insights with Visibility  
Following this success, Thingsfactory has **installed BuildUp! systems in over 20 buildings** in Montreal, Quebec, and Ottawa, significantly reducing water damage, increasing property values, and lowering insurance risks for large multi-dwelling property developers.



 Water Leak



 Fluid Flow Controls



# 04 The Milesight Ecosystem: Performance and Potential

Understand how the Milesight ecosystem works and its proven impact

# Building an Ecosystem of Collaboration

As a central hub, Milesight unites platform providers and solution providers to deliver competitive, market-ready offerings. Unlock new opportunities, accelerate growth, and empower businesses to thrive in an interconnected world together.



## Empowering Business Expansion

- Broaden sales channels to achieve growth
- Break through industry and brand barriers
- Strengthen brand value and enhance market promotion effectiveness



## Empowering Ecosystem Collaboration

- Develop IoT and AI applications tailored to user needs
- Integrate and expand mature ecosystem platforms
- Expand and build ecosystem influence

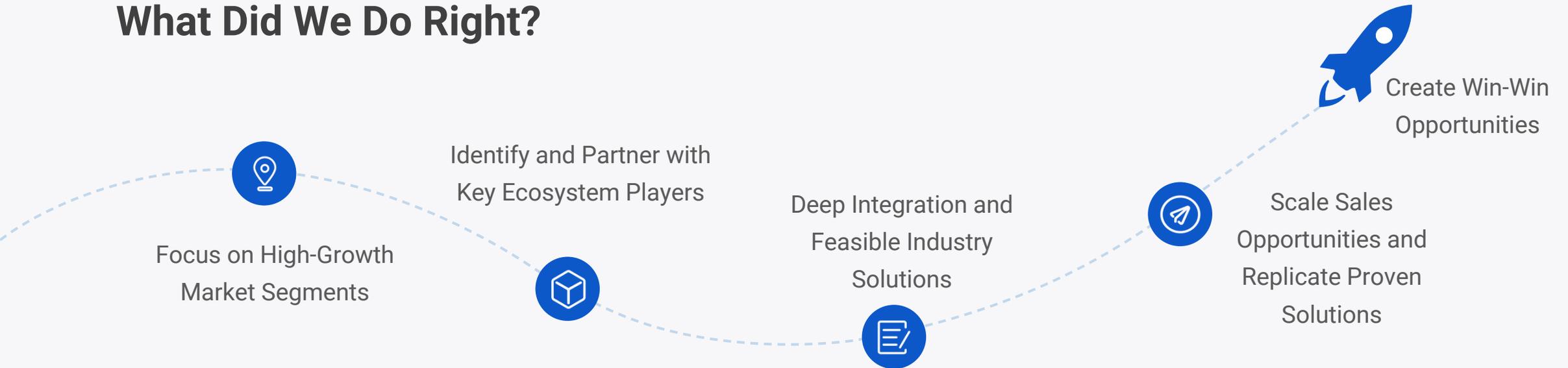


## Empowering Industry Development

- Build competitive industry solutions
- Drive digital transformation in mature industries
- Support emerging industries with AI and IoT products and technologies

# Building an Ecosystem of Collaboration

## What Did We Do Right?



**MILESIGHT PARTNERS**



# THANKS FOR WATCHING



Stay in Touch on Milesight Social Media!



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