

# Smart Hospitality Management for a Premium Hotel in Gramado, Brazil

Invisible IoT infrastructure enables energy efficiency, resource transparency, and seamless guest experiences.

Gramado, Brazil

Milesight Partner  
CCN Automação

Location  
Gramado, Brazil

Applications  
Smart Hospitality / Energy Management / Resource  
Metering / HVAC Management / Predictive Maintenance

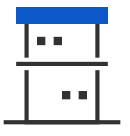
Related Product  
AM103L\*31 / WS203\*415 / WS301\*240 / EM300  
Series\*20 / EM500-SWL\*4 / WT30x\*65 / UG56\*47

## Background

Located in Gramado in Brazil's Serra Gaúcha region, the Owntime project is designed around a premium hospitality experience, where architectural aesthetics and guest comfort are equally important.

Managed by Casa Hotéis, the project includes luxury villas such as Casas T1 and T2, requiring a smart infrastructure that can seamlessly manage climate control, safety, and individual consumption of water, electricity, and gas without compromising the high-end interior design.

## Challenges



### Preserving Premium Architecture

Traditional wired automation requires extensive cabling, conduits, drilling, and masonry work. Such installation methods could compromise the premium wall and ceiling finishes of the luxury villas.



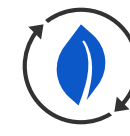
### Transparent Utility Management

Fractional ownership requires accurate, automated tracking of individual water, electricity, and gas usage. Manual meter reading can lead to billing errors, added workload, and owner-hotel disputes.



### Maintaining Year-Round Availability

Extreme weather in Serra Gaúcha makes reliable monitoring of generators, pumps, drainage, and backup power essential for hotel availability.



### Balancing Comfort and Energy Efficiency

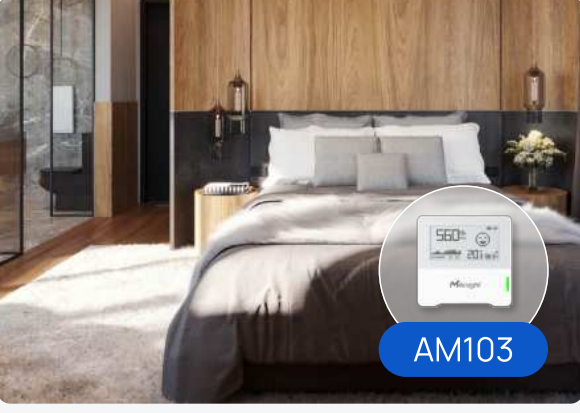
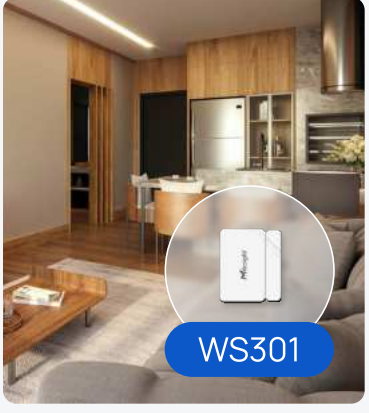
Heating and cooling systems need to deliver a comfortable environment without unnecessarily operating in unoccupied villas. Without real-time occupancy data, energy can be wasted on empty spaces.

## Solution

CCN Automação deployed a hybrid BMS architecture combining wired BACnet/Modbus infrastructure with a wireless Milesight LoRaWAN® IoT ecosystem across the hospitality rooms and luxury villas.

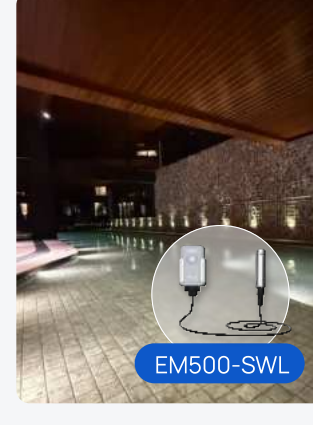
### Wireless Environmental & Occupancy Monitoring >

AM103 IAQ Sensors enable real-time monitoring of indoor air quality, temperature, humidity, CO<sub>2</sub>, and WS301 Magnetic Contact Sensors detect door/window status, supporting smarter environmental and occupancy management.



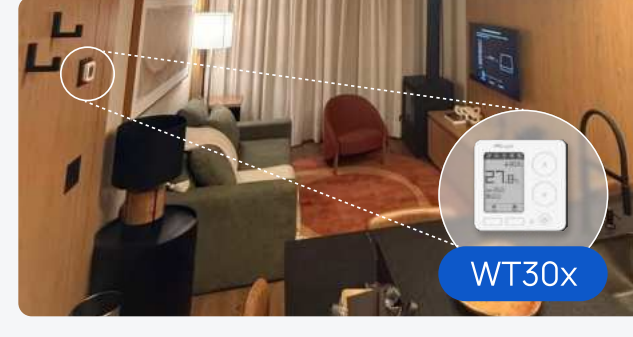
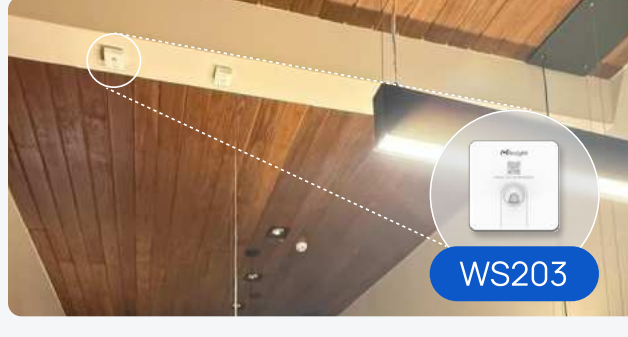
### Smart Resource & Facility Monitoring >

EM300 Series sensors and metering devices provide automated monitoring of gas, electricity, and water consumption for accurate and transparent utility billing. EM500-SWL sensors detect abnormal water levels and trigger early alerts to prevent flooding and support predictive maintenance.



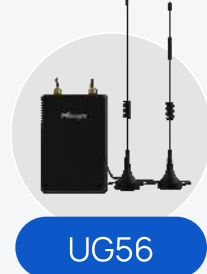
### Smart HVAC & Energy Management >

WS203 sensors detect when a villa is unoccupied, enabling automated HVAC control for AC systems and WT30x Smart Thermostats managing underfloor heating. Climate control is automatically adjusted or switched off when villas are vacant, reducing electricity consumption by 25–30%.



### Centralized BMS Integration >

UG56 LoRaWAN® Gateways connect the wireless IoT network to the Niagara Framework / PowerB platform, enabling centralized monitoring, automated control, and facility management with minimal wiring.



#### Indoor Air & Occupancy



Temperature  
Humidity  
CO<sub>2</sub>



Door status  
Window status

#### Energy Management



Occupancy



HVAC Control

#### Facility Management



Temperature  
Humidity  
Power Meter



Water level

LoRaWAN®



## Results

### 25–30% Reduction in Electricity Overhead

Occupancy-based HVAC control automatically reduces unnecessary heating and cooling in unoccupied villas, delivering up to 25–30% reduction in hotel electricity overhead.

### 20% Lower Facility Engineering Costs

Centralized monitoring and automated alarms help the operations team move from reactive troubleshooting toward predictive maintenance, reducing local facility engineering costs by 20%.

### Accurate & Automated Utility Billing

Automated water, electricity, and gas metering provides accurate individual consumption data, improving billing transparency and helping prevent disputes associated with fractional ownership.

### Seamless Guest Experience

Environmental conditions can be optimized before owners arrive, while occupancy and door status are monitored in the background—creating a truly frictionless luxury experience.

## Discover More about Milesight Products



AM103L  
3-in-1 IAQ Sensor



WS203  
Motion & TH Sensor



WS301  
Magnetic Contact Switch



EM300-TH  
Temperature & Humidity Sensor



EM300-DI  
LoRaWAN® Pulse Counter



EM500-SWL  
Motion & TH Sensor



WT303  
Magnetic Contact Switch



UG56  
Temperature & Humidity Sensor

## Why Choose Milesight



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Milesight was selected over proprietary luxury hotel automation brands for its superior, open-protocol wireless reliability, industry-leading low battery consumption (extending sensor lifespan up to 3 years), and seamless integration capabilities with multi-brand air conditioning systems (VRF Daikin via Coolautomation) and hotel property management back offices (PMS/ProXper). It offers unmatched industrial-grade build quality with competitive hardware CAPEX compared to conventional wired field devices.

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## Partner

### CCN Automação

CCN Automação, based in São Paulo and Rio de Janeiro, Brazil, is dedicated to transforming buildings through innovative, state-of-the-art building automation solutions. With a passion for technology and a commitment to excellence, it delivers greater efficiency to our clients. From climate control to access control, it integrates systems from different manufacturers into a single intelligent operation.

CCN  
AUTOMAÇÃO



### BOSCO & ASSOCIADOS

As the project designer, BOSCO & ASSOCIADOS played a key role in exploring the potential of IoT for this project. After receiving training from CCN Automação on Milesight solutions, the BOSCO & ASSOCIADOS team was impressed by the possibilities IoT could bring to the project. Together with CCN Automação, they introduced the IoT solution to the end customer and helped incorporate it into the overall project design, opening up new possibilities for smarter monitoring, control, and operational efficiency.

BOSCO & ASSOCIADOS comprises a highly skilled, specialized, and trained team—including consultants, engineers, architects, technicians, design specialists, and drafters—ready to serve clients with customized solutions leveraging state-of-the-art technologies. For 22 years, the company has steadily built an impeccable reputation as one of the most efficient electronic systems design and consulting firms in the domestic market—with a portfolio that also includes international projects—serving both the building and industrial sectors.