

# Smart Energy and Water Management for a Multi-Site Hotel Group

Delivering estate-wide visibility across six UK hotel sites for energy use, leak detection, and compliance

Location: United Kingdom



Milesight Partner  
**Initech**

Location  
**United Kingdom**

Applications  
**Water Leakage Detection,  
Temperature & Humidity Monitoring,  
Energy Efficiency Management**

Number of Devices Deployed  
**(EM300-SLD & EM300-MLD)\*421,  
TS302\*157, UG65\*6, UC100\*7,  
CT101, CT303**

## Background

Dakota Hotels partnered with Initech and Milesight to deploy a scalable, estate-wide IoT solution across six luxury hotel sites in the UK. The project delivers real-time visibility into energy and water consumption, early leak detection, and automated compliance monitoring – all without disrupting hotel operations or guest experience.



## Challenges

As Dakota Hotels expanded across multiple sites, the operations team faced several challenges.



**Hidden Water Leak Risks**  
Water leaks in riser cupboards and other concealed areas could remain undetected, increasing the risk of property damage and operational disruption.



**Manual Compliance Monitoring**  
Hot and cold water temperatures were monitored manually, creating inefficiencies and increasing the risk of gaps in Legionella compliance.



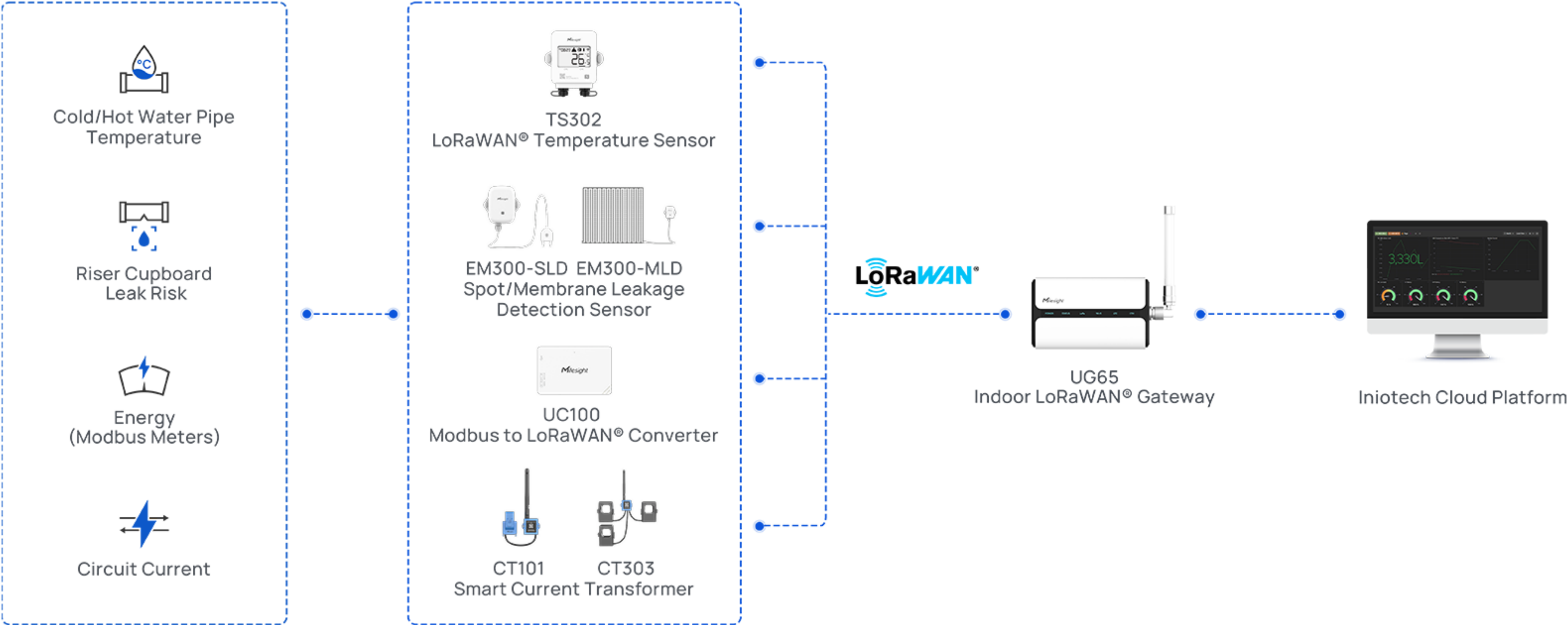
**Non-Invasive Deployment Requirements**  
Any solution needed to be retrofitted without disruptive building work or impact on guest experience.



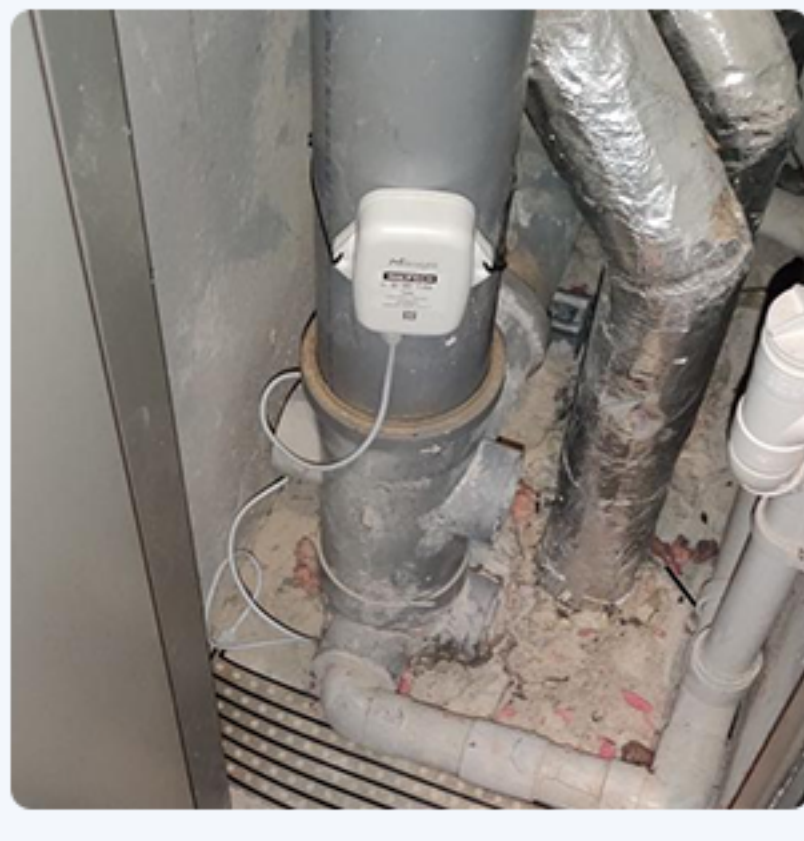
**No Unified Data Management Platform**  
Managing multiple hotel sites made it difficult to gain a unified view of energy and utility consumption, with data scattered across different systems and locations.

## Solution

Initech deployed a comprehensive, estate-wide IoT solution using Milesight LoRaWAN® technology, enabling Dakota Hotels to consistently monitor energy usage, water systems, and operational risks across all six hotel sites.

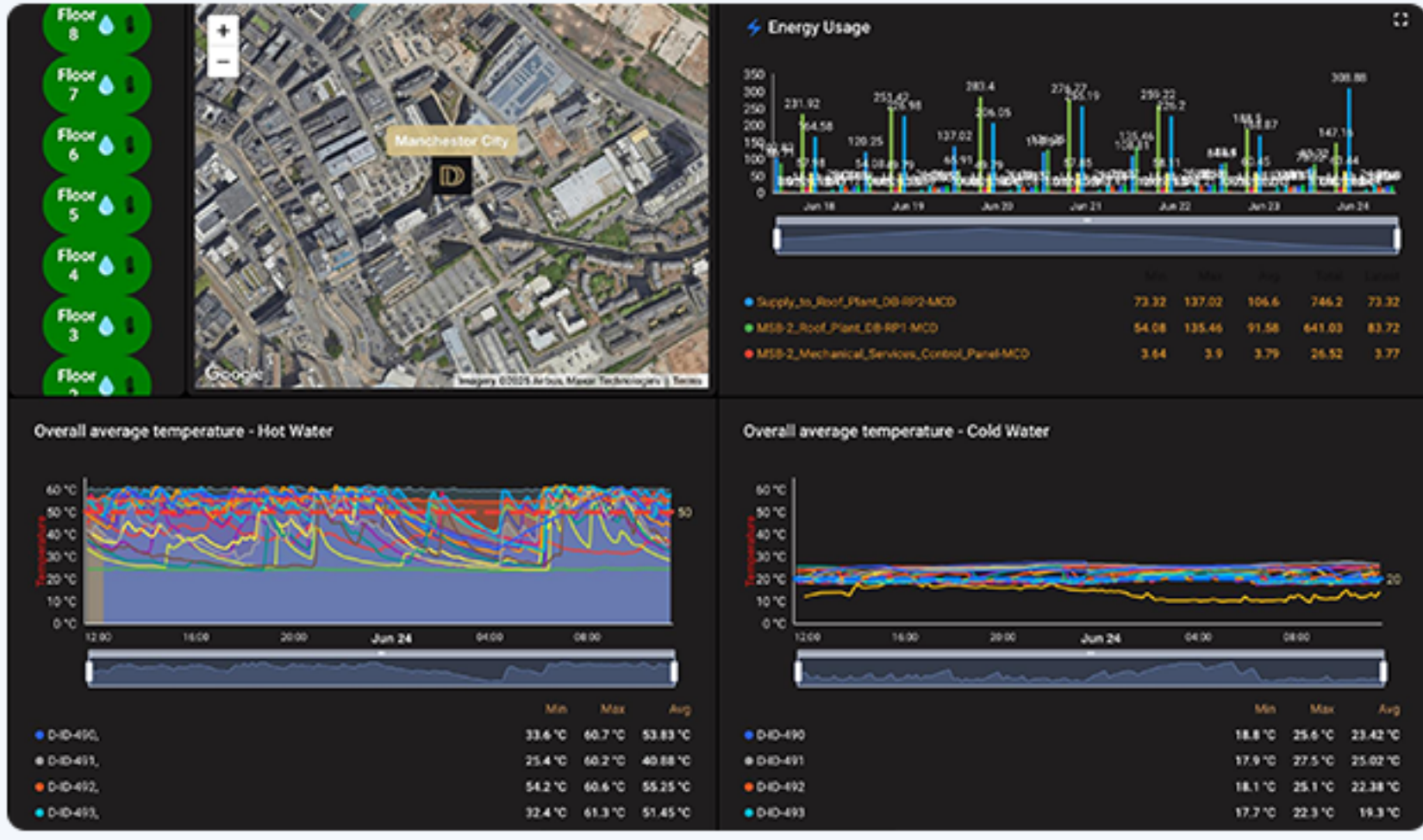


At each property, Milesight UG65 LoRaWAN® Gateways form a reliable wireless backbone, connecting sensors across guest areas and back-of-house infrastructure. Water-related risks are addressed through Milesight EM300-SLD/MLD Leak Detection Sensors installed in riser cupboards and other high-risk locations, providing early leak detection and triggering immediate alerts to hotel teams via email and phone.



To support both energy efficiency and regulatory compliance, Milesight TS302 Temperature Sensors continuously monitor hot and cold water systems, enabling automated Legionella compliance and removing the need for manual checks. For comprehensive utility and energy visibility, the solution integrates data from existing pulse-based and Modbus meters using Milesight UC100 Modbus to LoRaWAN® Converters, delivering real-time electricity data into a unified view. Where direct metering was not previously available, Milesight CT101 and CT303 Smart Current Transformers were retrofitted to extend monitoring to additional electrical circuits without invasive installation.

All data from Milesight devices is consolidated within Initech's cloud-based IoT platform, purpose-built for multi-site hospitality deployments. The platform provides live dashboards, automated reporting for audits and compliance, and intelligent alerting for abnormal conditions. Together, the solution delivers end-to-end visibility – from early leak detection and water temperature compliance to estate-wide energy monitoring – while establishing a scalable foundation for future optimisation and smart control initiatives.



## Results

**Early Leak Detection and Risk Reduction**  
Multiple water leaks were identified at an early stage across different sites, helping prevent damage that would otherwise have gone unnoticed.

**Unified Energy and Utility Visibility**  
Dakota gained a single, estate-wide view of energy and utility consumption through a centralised platform.

**Automated Compliance and Auditing**  
Continuous, automated monitoring replaced manual checks, providing timestamped data to support audits and regulatory compliance.

**Faster Response and Operational Efficiency**  
Real-time alerts enabled hotel teams to respond more quickly to leaks, temperature deviations, and other critical issues.

## Discover More about Milesight



Leakage Sensors



Temperature & Humidity Sensors



Smart Building Solutions

## Why Choose Milesight



Milesight was selected for its reliable LoRaWAN® ecosystem and its ability to support large-scale, retrofit-friendly deployments. The flexibility of Milesight sensors and gateways enabled hospitality monitoring across diverse hotel environments, while seamless integration with existing meters ensured rapid deployment and long-term scalability.

Together with Initech's platform, Milesight technology provides a robust foundation for unified monitoring, intelligent alerting, and future smart building initiatives across the Dakota Hotels estate.



### INITECH

#### About Initech

Initech is a leading provider of IoT digital solutions, specialising in complete, end-to-end systems that go beyond individual products. By leveraging LoRaWAN® technologies and secure analytics platforms, Initech helps hospitality, healthcare, and commercial customers simplify decision-making, reduce operational costs, and move towards a more sustainable, net-zero future.