



Connecting Multiple Systems with Smart Building Technologies

Establish a Dependable Data Infrastructure with Digi Solutions

Today's smart buildings are redefining how we manage energy, comfort and safety. By integrating automation, IoT technologies and data analytics, smart buildings operate more efficiently, adapt to occupant needs and support long-term sustainability goals.

At the center of this transformation is wireless connectivity — providing communication between systems, devices, edge and cloud infrastructure and people. Digi solutions form the digital backbone that enables integration across building automation, energy management, security and access control systems.

Addressing the Challenges of Smart Building Integration

To operate effectively, smart buildings require a robust, scalable network to support continuous data collection and control across multiple applications. Digi delivers secure, industrial-grade solutions that enable centralized visibility and control.

✔ Building automation and control

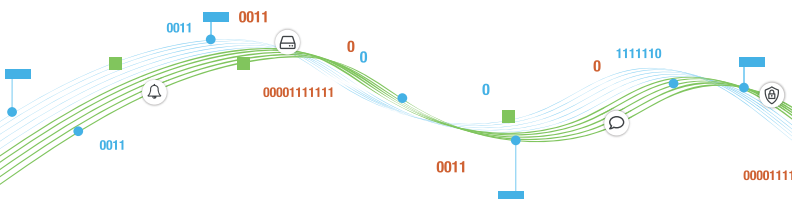
A building automation system (BAS) provides centralized oversight of Heating, Ventilation, and Air Conditioning (HVAC) systems, smart lighting, elevators and more. With sensors and schedules, building functions can be automated to optimize energy use and comfort, such as adjusting temperature based on occupancy or dimming lights during daylight hours. Embedded systems — including [Digi XBee® modules](#) and [Digi ConnectCore® SOMs](#) — enable wireless and Ethernet connectivity between distributed systems and the centralized BAS. [Digi gateways](#) support edge computing with local data processing to minimize latency and reduce bandwidth requirements.

✔ Energy management and sustainability

Smart energy systems reduce energy consumption via automated metering, load balancing and demand response. [Digi cellular router](#) and [Digi XBee](#) solutions connect devices such as smart meters and solar inverters to cloud-based dashboards for centralized energy monitoring. This enables facility teams to optimize power usage and track sustainability metrics.

✔ HVAC system monitoring and optimization

HVAC systems are among the largest consumers of energy in commercial buildings. With increasingly complex designs — such as zoned comfort and heat pump integration — automation is critical. Digi gateways with LTE and Wi-Fi ensure reliable cloud connectivity. Embedded Digi XBee modules enable OEMs to build wireless functionality into HVAC components for remote diagnostics, system alerts and performance tracking.



For more information, visit:

www.digi.com

877-912-3444 | 952-912-3444

© 2025 Digi International Inc. All rights reserved.



✓ Smart lighting systems

Intelligent lighting adapts to occupancy, daylight and scheduling to reduce energy use and support productivity. Digi XBee modules support [Zigbee](#), [DigiMesh®](#), [Wi-SUN®](#) and other networking protocols ideal for smart lighting control. These modules provide scalable, secure communication between sensors, switches and control platforms.

✓ Access control and security

Smart buildings use connected systems for biometric, RFID and mobile-based entry, as well as integrated video surveillance and alarms. Digi cellular routers and [serial device servers](#) enable encrypted connectivity to access control panels and surveillance infrastructure. [Digi Remote Manager®](#) and [Digi ConnectCore Cloud Services](#) allow remote provisioning, monitoring and firmware updates for enhanced control and system integrity.

Digi Solutions for Smart Building Infrastructure

Digi provides end-to-end solutions for connectivity at the edge, supporting smart building deployments — from a single site to a global real estate portfolio.

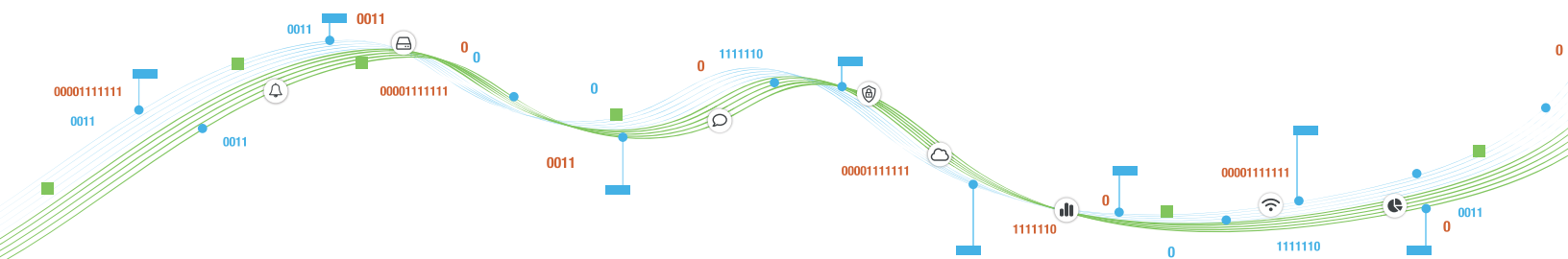
- ✓ **Scalability:** Digi edge devices and cloud-based services support scalability to meet the needs of expanding building networks
- ✓ **Security:** Built-in VPNs, firewalls and certificate management ensure secure data transmission
- ✓ **Reliability:** Industrial-grade Digi connectivity solutions provide dependable operation in harsh or remote locations
- ✓ **Manageability:** Digi Remote Manager and Digi ConnectCore Cloud Services simplify configuration, monitoring and updates across thousands of devices



Powering Data-Driven Environments

Digi makes it possible for operators to evolve static infrastructure into intelligent, responsive systems. With reliable wireless connectivity, buildings become easier to manage and more efficient to operate — supporting occupant comfort, safety and sustainability.

Learn more at [Digi.com](https://www.digi.com) ➔



For more information, visit:

www.digi.com

877-912-3444 | 952-912-3444