



# Smarter smart buildings with the emnify IoT SuperNetwork

Increase smart building system uptime,  
reduce operational overhead











# Smart buildings with the emnify IoT SuperNetwork

What makes a smart building smart? Systems that keep people and assets within secure and safe, that reduce climate impact through energy consumption and environmental monitoring, and lower costs for building owners with insights to optimize building management.

What do these systems have in common? They all need to be reliably connected and available to deliver the necessary data that underpins the benefits of a smart building.

Use Case		Cellular Connectivity Usage
	<b>Security Alarm Systems</b>	Cellular offers a backup communication method from Wi-Fi for burglar alarm systems. In the event of an internet connection failure or malicious tampering, cellular connectivity ensures that alarms can still notify authorities and property owners.
	<b>Fire Alarm Systems</b>	Cellular connectivity is crucial for fire alarm systems, allowing them to transmit fire alerts and notifications to a monitoring center even if primary communication lines are compromised.
	<b>Access Control Systems</b>	Some access control systems rely on cellular connectivity to manage entry and exit points in buildings. This enables remote access control, particularly in locations without wired internet connections.
	<b>Remote Building Monitoring &amp; Management</b>	When buildings or facilities are located in remote areas or lack reliable Wi-Fi access, cellular connectivity ensures that data from sensors, controllers, and security systems can be transmitted to a central monitoring station or the cloud.
	<b>Energy Monitoring</b>	In various building types, energy management systems rely on real-time data to optimize HVAC, lighting, heating, water usage, etc. Cellular is often used to backhaul data to a central building management platform.
	<b>Environmental</b>	Cellular technology plays a vital role in environment monitoring inside buildings, particularly in sectors like manufacturing and chemicals. It enables real-time data collection from various sensors to ensure compliance with environmental regulations and to maintain safe, sustainable operations.



Cellular provides resilient connectivity and simplifies installation by not requiring access to short range networks. Advancements in 5G communications for targeted IoT use cases combined with falling data costs will continue to push cellular connectivity for smart building systems. Choosing the best connectivity technology and provider for your particular solution and market is a critical step in designing, planning and deploying smart building systems and devices, with lasting impact on the system's cost, performance, availability, and lifetime.

## Introducing the emnify IoT SuperNetwork

The emnify IoT SuperNetwork is a single, distributed service with access to more than 540 networks in 180 countries, including satellite, for uninterrupted connectivity around the globe. Reliable, redundant IoT connectivity to connect critical smart building systems including:

- fire and safety alarms
- access control
- security and surveillance
- metering
- environmental monitoring

### Cloud-based, local network IoT connectivity regardless of building location or system requirements





## **The emnify IoT SuperNetwork provides the industry's first, global, cloud-native, distributed IoT connectivity service**

The SuperNetwork reduces operational complexity with single SIM access to local networks, including satellite, all around the globe.

- Global, dedicated, purpose-built network for IoT, access to local networks around the world with industry-leading LTE-M direct access partnerships.
- Cloud-based core network distributed in 22+ AWS cloud regions with the ability for rapid innovation to adapt to changes and requirements in the market.
- No dependencies on upstream carrier partners for critical business requirements including coverage, commercial and regulatory terms, and technical functionality.
- Connect to cellular or satellite networks with a single SIM for deployments to smart buildings outside of cell infrastructure or as backup connectivity.

## **SuperNetwork smart building advantage**

### **Maximize device uptime**

Access to 540+ networks in over 180 countries, mitigate the risk of downtime due to network outages or degraded signal strength. Satellite and cellular connectivity via a single SIM ensures connectivity even in remote environments.

Reliable over the air updating, and intelligent network switching with the emnify IoT eSIM: 3GPP compliant, based on eUICC standards and proprietary multi-IMSI app, available in all form factors. Customize for your device and use cases. For example, optimize to reduce battery consumption to extend device lifetime.

### **Minimize operational overhead and site visits**

Eliminate the costs of managing multiple providers, platforms, and integrations. The SuperNetwork provides connectivity and management for smart building devices and systems regardless of where they're deployed.

Remotely manage devices and SIMs across all smart building deployments from a central connectivity management platform, reducing costly field visits, device and SIM swaps. Integrate connectivity management functionality with smart building applications and operations.

### Overcome scaling challenges

Expand smart building device deployments anywhere in the world. Single APN, bulk configure, automate start and discontinuation of SIM contracts, activate, deactivate, and suspend SIMs from one central platform.

Flexible data plans that grow with your business and bandwidth needs. No lock-ins, customize and optimize data plans for low and high bandwidth use cases.

### Expert-led, dedicated IoT service and support for every size project

Keep your smart building solution on track with 24/7/365 live, dedicated support for every step of your deployment. Device selection or design, planning, onboarding, troubleshooting, and optimizing, emnify's team of IoT experts respond quickly to keep your team moving forward.

## Get Started Today



Schedule an IoT connectivity check with our engineering team today:

[CONTACT US](#)



Test your smart building device with free SuperNetwork test SIMs:

[START YOUR TRIAL](#)



Learn more about the SuperNetwork for smart buildings:

[LEARN MORE HERE](#)



Technical resources and documentation to support you:

[GET THE DOCUMENTATION](#)