Transforming connectivity:

How IOTEK slashed downtime by 50% with emnify

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50%
reduction in system downtime

80%
reduction in unauthorized device usage

40%
increase in customer satisfaction

Helping to **ensure power stays on** during natural disasters

IOTEK's journey began in the wake of a Category 5 hurricane that ravaged Puerto Rico, revealing the need for resilient communication systems amidst natural disasters. This event underscored the criticality of reliable IoT connectivity for energy access and basic services, propelling IoTEK to address these challenges head-on.

IOTEK's initiative to strengthen communication systems extends beyond immediate disaster response, encompassing a range of IoT solutions aimed at ensuring consistent service under diverse conditions. Their involvement spans from providing essential connectivity for smart metering and grid infrastructure projects to collaborating on larger initiatives.

A notable example is their partnership on a substantial smart metering deployment for the Puerto Rico Electric Power Authority, facilitated in collaboration with Caribbean Metering System, their sister company. In this project, IOTEK's expertise was pivotal in establishing the connectivity framework, while Caribbean Metering System handled the direct implementation of the 45,000 meters.

> **The emnify SuperNetwork platform has revolutionized the way we manage IoT connectivity. Its unparalleled network flexibility has not only enhanced our operational efficiency but also elevated our customer service to new heights."**

Carlos Fuentes
Chief Business Officer, IOTEK

Smart cities and grids with IOTEK

IOTEK, headquartered in Orlando, Florida, is a technology leader specializing in IoT solutions for smart cities and grids. With over three decades of accumulated professional experience, IOTEK services over 1,000 clients and manages more than 10,000 connected units.

As a certified Minority Business Enterprise, IOTEK's mission is to enhance communication resilience, particularly in disaster-prone areas, leveraging their expertise in IoT, AI, and software development to drive digital transformation for critical infrastructure and public services.

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A connectivity solution

The emnify IoT SuperNetwork, unlocked by a global emnify IoT eSIM, gave IOTEK a much-needed connectivity solution for their varied projects. The IoT eSIM provides seamless, multi-network access and the ability to switch networks dynamically, ensuring reliable service worldwide, even in challenging locations.

Key security features, such as IMEI locking, ensure the eSIM is dedicated to a specific device, preventing unauthorized use and enhancing device security. The SuperNetwork is easily scalable and makes it possible for IOTEK to broaden their services from smart metering to fleet management, avoiding the hassle of multiple telecom contracts and improving their smart city and grid projects' resilience and success.

Empowering smart infrastructure: IOTEK's connectivity transformation with emnify

emnify was instrumental in facilitating IOTEK's advancements in smart city and grid connectivity. By adopting the IoT SuperNetwork, IOTEK enhanced the deployment, security, and reliability of their IoT solutions.

This collaboration demonstrates the critical role of the SuperNetwork in supporting IOTEK's commitment to resilient infrastructure, markedly improving their service delivery and client satisfaction. The initiative established new benchmarks for IoT connectivity efficiency and reliability, elevating IOTEK's projects to greater success.

Metrics for success

- IOTEK experienced remarkable improvements with emnify's solutions, including a **50% reduction in system downtime**, significantly enhancing overall reliability and service continuity. This improvement was particularly noted in their comprehensive connectivity deployments, where real-time management and dynamic network switching capabilities of emnify played a crucial role.

- An **80% reduction in unauthorized device usage** was achieved through enhanced security features such as IMEI locking, leading to improved control over their IoT ecosystem.

- These enhancements contributed to a **40% increase in customer satisfaction**, reflecting the elevated quality and reliability of IOTEK's IoT solutions.

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Full-spectrum support for IOTEK

Global connectivity: Leveraging the emnify IoT SuperNetwork, IOTEK gains access to over 540 networks in more than 180 countries, providing redundant connectivity to keep devices reliably connected. This was particularly vital in disaster-prone areas where reliable connectivity is essential for critical infrastructure operations. The SuperNetwork's unique advantage lies in offering access to 3-4 networks in any given region, significantly enhancing connectivity reliability and coverage.

Operational control: IOTEK utilized the emnify cloud-based management platform for real-time insights into connectivity status and data flow between devices and IoT applications, enabling strategic adjustments and ensuring continuous, secure data transmission. This allowed for immediate adjustments and optimizations, significantly reducing downtime and operational inefficiencies.

Security and compliance: The emnify IoT eSIM has built-in security protocols, including state-of-the-art encryption and IMEI locking, and is instrumental in preventing unauthorized access.

Integration and support: emnify's API-first approach enables IoTEK to quickly integrate the SuperNetwork's connectivity management capabilities into their existing IoT operations systems. This, coupled with dedicated customer support, ensures that IOTEK can quickly resolve issues and adapt to new requirements, maintaining operational continuity and accelerating adoption of new technologies and capabilities.

emnify services utilized

IoT eSIM
The emnify IoT eSIM with a unique combination of a multi-IMSI applet with the eUICC standard for uninterrupted global connectivity.

Connectivity management
A single connectivity management platform for SIM lifecycle management, cross-network control, and real-time insights.

Intuitive security
Security features with advanced encryption, Secure Access Service Edge (SASE) network architecture, and IMEI locking.