Modernizing Grid Automation with Digi IX30

The future of smart grids is smarter, more resilient, and more sustainable

The Challenge

Today's electric grids need real-time communication to stay reliable, reduce outages and optimize power quality. But deploying secure, resilient and low-latency connectivity in remote and harsh environments is difficult. Many traditional solutions are not cost effective and lack edge computing capabilities and robust remote management tools — making seamless grid modernization a big challenge.

The Solution: Digi IX30

Meet **Digi IX30** — a rugged LTE industrial router, engineered to deliver high-performance wireless networking in extreme conditions. Secure, remote connectivity supports real-time monitoring, control and automation of critical grid assets. With a range of variants, including **Digi-IX30-0EG4** with Anterix private network support, this rugged industrial solution supports edge computing for rapid processing in critical infrastructure applications at the edge.

Intelligent Reclosers

Reclosers detect and isolate faults on distribution lines, helping utilities prevent widespread power outages. ***Digi IX30*** *provides real-time two-way communication:*

- Enabling instant fault detection and self-healing grid capabilities
- Providing remote control and firmware updates via **Digi Remote Manager®**
- All while leveraging advanced data security through **VPN and firewall protections**

Capacitor Banks

Capacitor banks help regulate voltage and reduce power losses by dynamically adjusting reactive power. Digi IX30 ensures efficient capacitor bank operation by:

- Utilizing **Modbus bridging** for seamless **SCADA** system integration
- Providing stable **LTE connectivity** for real-time voltage and power factor adjustments
- Enabling remote diagnostics and proactive maintenance to minimize planned downtime

Voltage Regulators

Voltage regulators maintain consistent voltage levels across the distribution network. ***Digi IX30*** *enhances regulator performance through:*

- Low-latency LTE connectivity for instant voltage control
- Multi-carrier failover via **dual SIM slots** for uninterrupted operation
- A ruggedized design (C1D2, ATEX and NEMA TS2 certification) purpose-built for extreme conditions

For more information, visit:

www.digi.com

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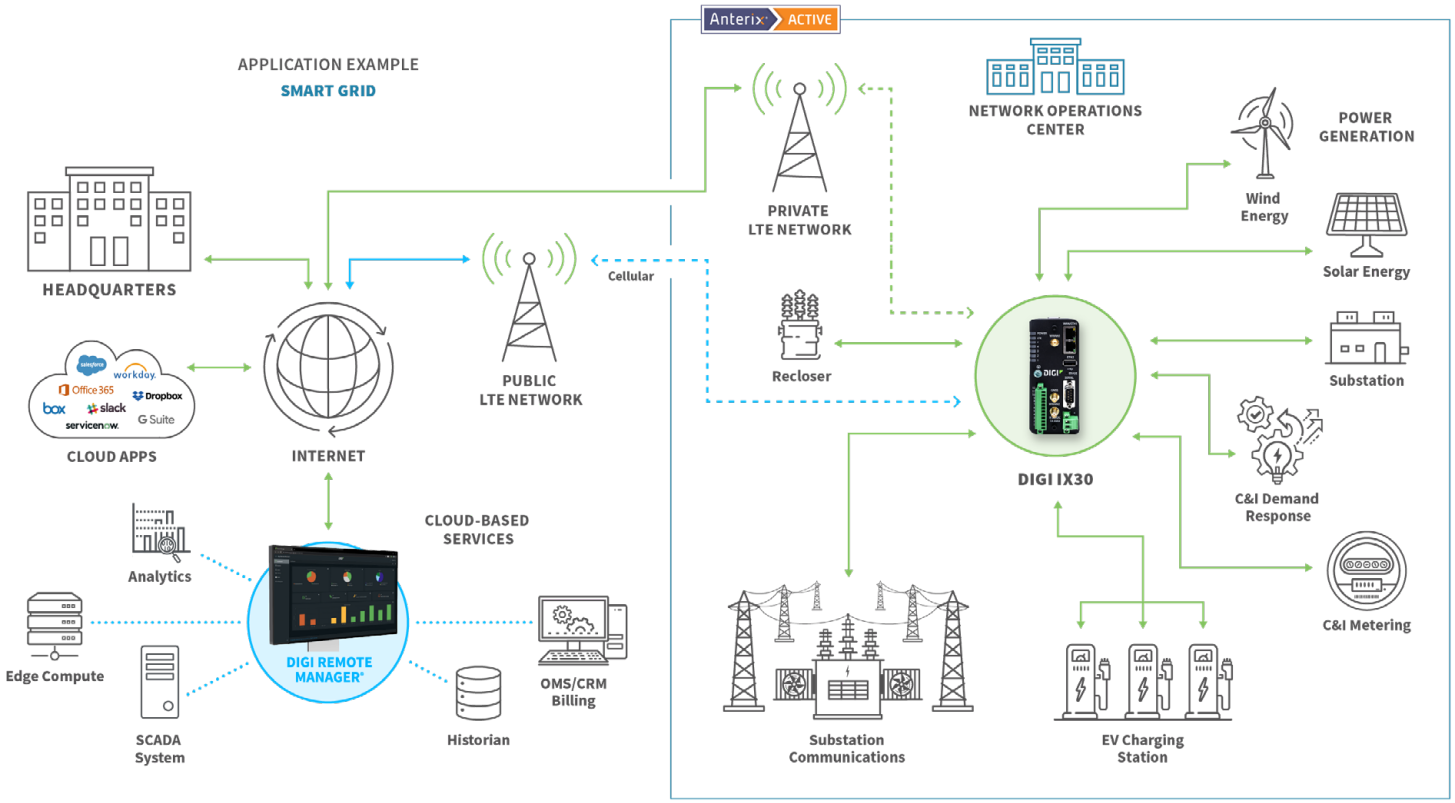

Beyond Connectivity: Why Digi IX30?

- **Secure and resilient:** Dual SIM failover, **Digi SureLink®**, VPN and firewall protections
- **Edge intelligence:** Modbus-to-IP conversion, Python scripting and GNSS receiver asset tracking
- **Remote management and scalability:** Digi Remote Manager for mass configuration, OTA firmware updates, and API cloud integration
- **Durability for harsh environments:** Wide temperature range (-34 °C to 74 °C), IP30-rated enclosure, and low-power mode for solar-powered deployments

The Outcome: Powering the Future of Smart Grids

By integrating Digi IX30 into their smart grid infrastructure, utilities can enhance power reliability with real-time automation and self-healing grid capabilities. They can reduce operational costs through predictive maintenance and remote diagnostics. Network security and resilience are made stronger with advanced cybersecurity features. Deployment and management become more efficient with Digi Remote Manager, reducing the need for manual interventions.

The Digi IX30 LTE industrial router is a future-proof solution for modernizing the electric grid, enabling secure, efficient and scalable smart grid communications.

- Improve grid reliability with real-time automation and self-healing capabilities
- Cut costs using predictive maintenance and remote diagnostics
- Strengthen network security with advanced cybersecurity features
- Simplify deployment with **Digi Remote Manager**, reducing manual interventions

Learn more at: www.digi.com

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