Celluar Communications for Distribution Automation Flexible, highly secure wireless solutions support control and automation projects across utility distribution systems

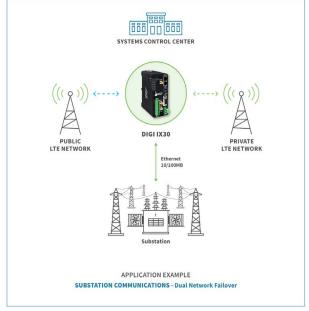
Distribution Automation

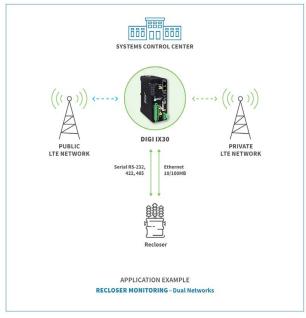
The utilities business is challenged from every angle to be productive and profitable, even as the industry undergoes a major shift to renewable energy sources. Managing remote equipment in widely distributed locations can be difficult and expensive. Yet delivering maximum uptime at minimal cost is a basic business requirement.

Faced with rising customer service expectations and increasing performance scrutiny, distribution network operators are turning to Digi wireless solutions to communicate with distribution automation assets such as:

- Recloser controls
- Capacitor bank controls
- Switches
- SCADA systems
- Substation intelligent electronic devices (IEDs)
- Data loggers







For more information, visit:

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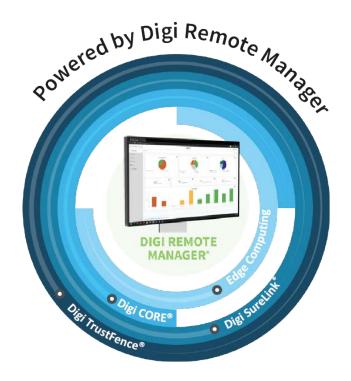
Digi wireless solutions, consisting of <u>Digi Remote Manager</u>® and industrial-grade Digi IX-series cellular routers, enable electric utility professionals to confidently automate critical elements of a widely distributed electrical grid. Digi Remote Manager enables utility IT teams to deploy, configure, manage and maintain their networks from virtually anywhere, through a laptop, tablet or mobile device.

Solutions for Mission-Critical Communications

Digi IX-series cellular routers, such as Digi IX30, are purpose-built for the most demanding operations, and built for a 10+ year service life. Features:

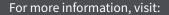
- Secure: Dynamic routing, VPN and firewall support
- Carrier-agile: Multiple carriers supported from a single device
- Flexible: Ethernet, RS-232/422/485, GNSS, USB, and analog/digital I/O
- Certified: C1D2, ATEX, and NEMA TS2 ratings for hazardous environments

Choose the network that meets your critical needs and requirements. Digi industrial solutions support private networks for the most secure, available and reliable connectivity. Learn more about <u>private networks</u>.



Mission-critical networks must be always on, even in the event of a large-scale public emergency. Digi solutions support first responder networks like FirstNet® or Verizon Frontline — and utilities qualify for pre-emptive communications on these networks. Learn more about <u>FirstNet</u> and support for extended primary users.

Problem	Digi Solution
Equipment is often positioned in remote or difficult-to-reach locations	Digi Remote Manager lets network managers monitor equipment status and update software and firmware from a laptop, tablet or mobile device — or access offline devices out-of-band
Changing cellular networks requires expensive hardware replacement	Digi IX-series routers are carrier agile, enabling one device to quickly switch between networks for high-reliability
Switch, recloser and capacitor bank control- lers require secure two-way communications	Digi IX-series routers offer a full set of industrial-grade security features including 256-bit AES encryption and FIPS 140-2 certification, with built-in <u>Digi TrustFence</u> ®
Weak signal strength due to remote locations and high signal interference in substations	Digi IX-series routers can be pole mounted or placed outside of substation control houses and optimized with external antennae
Diverse field assets may require multiple interfaces	Digi IX-series routers offer Ethernet, RS-232/485 serial, GNSS, USB, and analog/digital IO



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Customer Story

EDF Energy

Digi helped the largest electricity distribution network owner in the UK solve the problem of remotely monitoring its 400 electricity substations across a large geographic region. Digi wireless routers provide a reliable connection to EDF Energy's substations, while Digi Remote Manager enables easy configuration and management of the network.

EDF Energy also uses Digi cellular routers to link its legacy monitoring system to a wireless IP network. Performance information is sent initially via EDF Energy Networks' VSAT satellite network. However, if there is a network problem or if the primary connection becomes unavailable, the routers intelligently detect the issue and switch to a mobile network connection.



"...we no longer have to dedicate time and money sending out our staff to either fix problems or wait for external engineers at substations."

- Senior Project Engineer, EDF Energy

Why Wireless for a Landline Alternative?

1. Reduced Monthly Recurring Fees

- Plug-and-play: no cable expert or licensed electrician is required to install equipment
- Multiple mobile network operators (MNOs) provide data plan options and network redundancy
- No expensive cable trenching or drilling is required for flexible mounting options
- 5G provides future-proofing and investment protection

2. Infrastructure Is Already There

- Excellent coverage with instant access to worldwide networks
- Carriers (not the electrical utilities) maintain towers and uptime
- Reliable and secure connections with instantaneous fallback

3. Easy to Setup/Install

- Remote management and monitoring via Digi Remote Manager
- No waiting for the phone company to set up a line
- Seamless integration with legacy devices

4. It's Wireless

- True network diversity wires are more vulnerable to the elements
- Wires are also expensive to install, and are subject to theft and vulnerable to damage







Connect with Digi

Seeking next-generation solutions and support? Take these next steps:

- Contact us to talk to a Digi expert
- Sign up for our newsletter to learn about emerging trends and new solutions
- Shop for solutions from Digi and our partners.

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