# DIGI

Industrial IoT Solutions and Applications

Connectivity and embedded solutions to meet the needs of diverse industries

Digi Delivers Industrial Connectivity to the Edge

Internet-of-things (IoT edge) capabilities and connectivity play an increasingly important role in virtually all industrial processes. Across multiple industries there are common application needs and similar use cases. For example, tank-monitoring applications are used in agriculture, the oil and gas industry, and in municipal water/wastewater systems.

Digi IoT edge solutions are flexible enough to meet the needs of all these applications, while fulfilling the unique requirements of each individual organization.
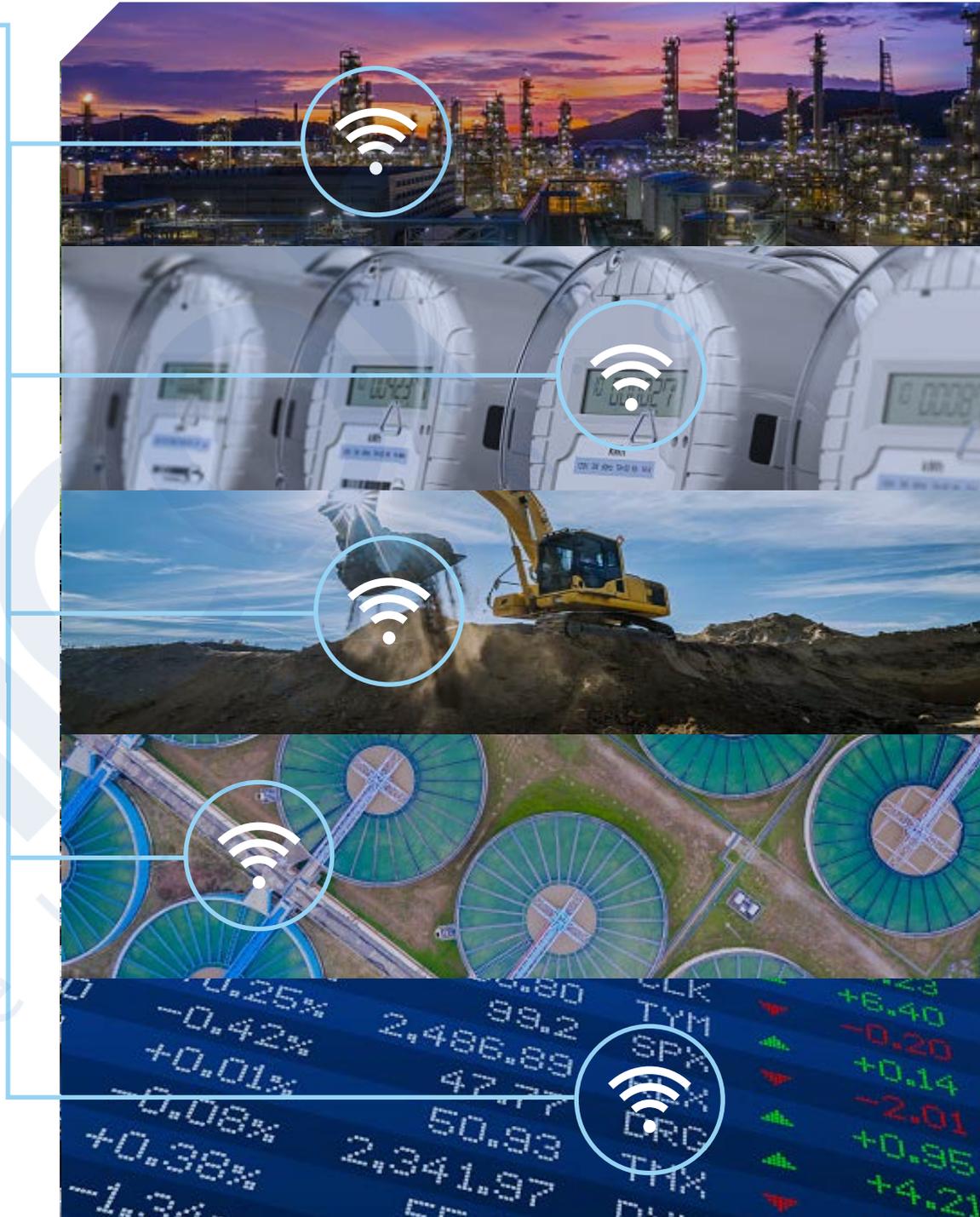
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Digi IoT in Industrial Applications

Oil and Gas

Oil and gas companies can collect data from all parts of the value chain with the help of Digi technology. From upstream oil pumps and platform telematics, to midstream pipeline monitoring and metering, to tank farms and downstream point-of-sale (POS) systems, Digi IoT enables companies to capture and analyze field data from sensors and SCADA systems in near-real time.

Companies can use that data to optimize well, pipeline and facility performance while taking advantage of remote management capabilities to reduce the need for costly truck rolls and maintenance.

Electrical Utilities

Electrical utilities around the world use IoT technology to drive more efficient energy use and better customer service.

Evolving technologies are driving the evolution of electrical "smart grids." They enable utility companies to react quickly to spikes in demand, remediate outages and operate more efficiently overall. Smart grid systems are more resilient, cheaper to operate and better for the environment. Digi helps utilities to establish edge networking methods to improve network grid efficiency while maintaining critical SLAs.

Construction

The construction industry deploys IoT solutions in a wide range of applications today, where cellular connectivity and embedded systems provide critical insights to support efficiencies, cost savings and workplace safety.

IoT solutions can monitor the performance of heavy machinery, track the location of materials and equipment, and conduct building site surveillance. IoT solutions even perform specialized tasks such as tracking sensor data to monitor the exact temperature of concrete during the curing process.

Water/ Wastewater

Municipalities everywhere face the challenge of keeping water supplies safe and abundant while making sure that wastewater is treated in strict compliance with environmental standards.

Digi provides solutions for both sides of the water use cycle. IoT systems monitor wells, reservoirs lift stations, sewage treatment plants and other components of complex water and wastewater systems. Wireless connectivity from Digi also enables real-time alarm and flow data, so operators can address problems quickly, before they become critical.
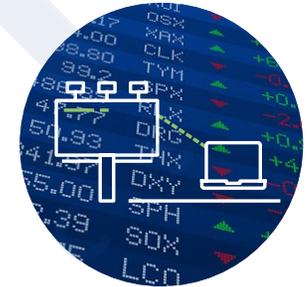
Digital Signage

Digital signage, in addition to providing information in retail settings and public spaces, is now supporting a number of industrial use cases. These include traffic advisories for road construction projects, as well as signage in city centers and subway terminals where environmental conditions can vary wildly.

Digi offers a range of purpose-built solutions for digital signage applications where wired connections are impractical, enabling users to update and modify displays remotely and provide secure, reliable connectivity for outdoor environments.

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Digi Supports Process Improvement With Your IoT Solution

Operational Efficiencies

- Digi IoT connectivity helps provide precision and efficiency for manufacturing automation, process control and robotics. Constant production line monitoring helps identify quality problems, and predict equipment maintenance issues.

- Reduce or eliminate "truck rolls" and the need for manual intervention with Digi Remote Manager®, the scalable management platform that lets you configure, monitor and manage IoT devices from one central point of control, or from authorized devices in the field.

- Benchmark the performance metrics of machinery and gather real-time sensor data to help maximize uptime and minimize maintenance costs.

- Take advantage of energy-efficient design that extends battery life in remote or hard-to-reach deployments.

Supply Chain Visibility

- Provide real-time inventory status to ensure that skilled building tradespeople have the materials they need, when they need them.

- Track the location and movement of materials, equipment and fleets to ensure accurate routing and on-time delivery.

- Monitor temperature-sensitive food and pharmaceuticals with sensor solutions and automated reporting from SmartSense by Digi.

- Gain insights into delivery schedules and driver safety with vehicle telematics.

## Edge Intelligence and IT Operations

- Perform environmental monitoring using networked sensors to quickly detect leaks or fire hazards and alert personnel – for worker safety as well as compliance with OSHA and other regulations.

- Ensure business continuity with out-of-band management capabilities through a secure VPN tunnel and serial ports on Digi devices.

- Support reliable connectivity with the Digi SureLink® "keep-alive" function, which maintains a persistent connection in the event of a service interruption.

- Gather real-time data with Digi IoT devices to enable end-user analytics of historic trends and variables that affect performance.

Worksite Safety and Security

- Ensure compliance with OSHA and other regulations with environmental monitoring by networked sensors that quickly alert users to leaks or other hazardous situations.

- Monitor access to building sites with video surveillance data transmitted via Digi routers.

- Enhance worker safety with innovations such as "smart hardhats" that monitor exposure to UV rays, noise and temperature extremes, and wearables that detect unsafe movements.

- Protect critical IoT infrastructure with the multi-layered defense of the Digi TrustFence® security framework.
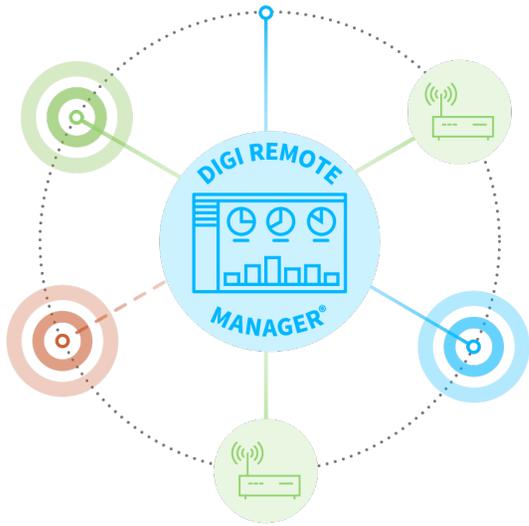
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Digi Remote Manager for Industrial IoT

Digi Remote Manager® is an indispensable part of any industrial IoT deployment. Accessing your IoT edge devices through Digi RM enables you to monitor, manage and troubleshoot your network remotely, without the need for a "truck roll" to physically access a device. Digi RM also provides a performance dashboard for troubleshooting devices across multiple locations – with alarms and reports to keep you a step ahead of any problems.

Proven Durability, Long-Term Reliability

Digi routers, extenders, gateways and embedded modules are designed and built for a long, trouble-free service life. Priced for a diverse range of use cases, Digi industrial-grade products deliver robust, flexible connectivity with specifications to support applications in of challenging conditions and temperatures.

Digi IX10 provides reliable, cost-effective connectivity for many industrial applications. It enables remote access to utility meters for gas and electricity, flow meters for pumps and pipelines and more.

Digi IX20 is ruggedized and flexible, with optional Wi-Fi, two Ethernet ports and serial port connections. Digi CORE® plug-in LTE modems can be swapped out of the Digi IX20 for connectivity upgrades without replacing the router.

Digi IX30 is a flexible router designed for critical infrastructure applications. It connects RTUs, PLCs and HMI devices in harsh, remote environments and is optimized for DIN rail or shelf mounting.

Digi Connect® Sensor+ offers low-cost, remote monitoring and diagnostic capabilities for wirelessly reporting data pertaining to fluid levels, flow rates, pH and other environmental metrics.

Digi TX54 offers reliable, high-speed connectivity for heavy equipment used in construction and other industries. Digi TX54 features dual cellular radios and robust Wi-Fi, plus USB, serial, Bluetooth® and 4-port Ethernet connectivity.

OVER 15 MILLION DEPLOYED

Digi XBee® modules offer embedded connectivity for an enormous range of devices and M2M connectivity needs in the field – from machinery and equipment monitoring to hardhats with built-in sensors, to a range of agricultural use cases such as feed bin, silo, equipment and irrigation system monitoring.

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