



INDUSTRIAL
FIRSTNET CAPABLE™
LTE ROUTER



Manage this device with
Digi Remote Manager

DIGI IX30

Intelligent 4G LTE router designed for critical infrastructure and industrial applications

Digi IX30 is an intelligent 4G LTE router designed for optimal performance and reliability across a wide range of critical infrastructure and industrial applications. This complete solution is fully integrated with software and security, providing a secure, reliable connection to industrial controllers, process automation equipment and smart grid assets on third party sites or remote locations.

Software-defined, multi-carrier networking and global LTE and HSPA+ options make it easy to get connected. This drop-in connectivity gives operators a way to reduce downtime and service calls, and also increase revenue by bringing distributed sites online faster.

The Digi IX30 router offers **FirstNet Capable™** models designed to meet the demands of first responders for critical communications. Additional industrial use case

applications for Digi IX30 include building and process automation controllers, IP cameras and access controllers, remote data loggers, flow meters, sensing equipment, telco infrastructure, and traffic and obstruction lighting.

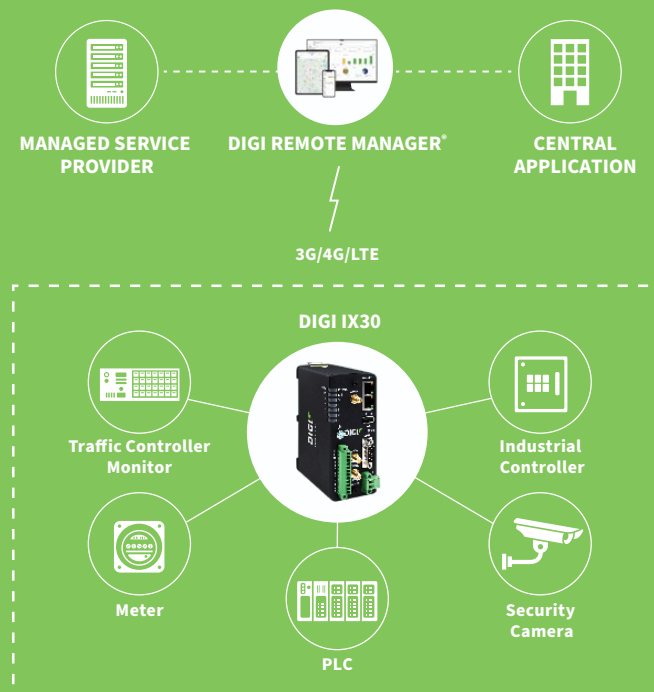
Gain critical insights into your deployed devices and manage your network with **Digi Remote Manager®** (Digi RM) — the command center for your deployment. Digi RM is a cloud-based solution that facilitates easy setup, as well as mass configuration, maintenance and visibility into the health of your network, whether you deploy dozens or thousands of devices.

In the event of an interruption to your primary network connection, Digi RM also provides secure terminal access for out-of-band management of edge devices via serial port and command-line interface.

FEATURES AND BENEFITS

- Global LTE and HSPA+ support and certification on major carrier networks around the world
- Ethernet, serial I/O and Modbus bridging
- Extremely resilient cellular connection through Digi's patented **SureLink®**, VRRP+ protocol and dual SIM slots
- GNSS receiver supporting GPS, GLONASS, BeiDou and Galileo
- License-free enterprise software: VPN, firewall, logging and authentication
- **Digi Remote Manager** platform for easy setup, mass configuration and management
- Rugged enclosure, optimized for DIN rail or shelf mounting
- C1D2 and ATEX rated; NEMA TS2 temperature rated

APPLICATION EXAMPLE



RELATED PRODUCTS



SPECIFICATIONS

DIGI IX30

WIRELESS INTERFACES

CELLULAR

FIRSTNET CAPABLE™ LTE-ADVANCED CAT 7	LTE-Advanced Cat 7— FDD: B2, B4, B5, B7, B12, B13, B14 - FirstNet®, B25, B26, B66, B71; TDD: B41, B42, B43, B48; WCDMA: B2, B4, B5; GNSS: GPS, GLONASS, BeiDou, Galileo, QZSS
LTE CAT 4 GLOBAL	LTE Cat 4 — FDD: B1, B2, B3, B4, B5, B7, B12, B13, B18, B19, B20, B25, B26, B28; TDD: B38, B39, B40, B41; WCDMA: B1, B2, B4, B5, B6, B8, B19; GSM: B2, B3, B5, B8; GNSS: GPS, GLONASS, BeiDou, Galileo, QZSS
LTE CAT 4 AU/NZ	LTE Cat 4 — FDD: B1, B3, B5, B7, B8, B18, B19, B21, B28; TDD: B38, B39, B40, B41; 3G: B1, B5, B6, B8, B9, B19; GNSS: GPS, GLONASS, BeiDou, Galileo, QZSS
CONNECTORS	(3) 50 Ω SMA (2x cellular, 1x GNSS); center pin: female
SIM SLOTS	(2) Mini-SIM (2FF)
SIM SECURITY	Screw-down SIM cover
GNSS	Protocol NMEA 0183 V3.0 Acquisition Time Hot Start 1 s; Warm Start 29 s; Cold Start 32 s Accuracy Horizontal: < 2 m (50%), < 5 m (90%); Altitude: < 4 m (50%), < 8 m (90%); Velocity: < 0.2 m/s

SOFTWARE & MANAGEMENT

REMOTE MANAGEMENT	Digi Remote Manager® (cloud based); SNMP v1/v2c/v3 (user installed/managed), SMS
LOCAL MANAGEMENT	Web UI (HTTP/HTTPS); CLI (Telnet, SSH, Serial)
MANAGEMENT/ TROUBLESHOOTING TOOLS	FTP, SFTP, SCP; protocol analyzer with PCAP for Wireshark; event logging with Syslog and SMTP; NTP/SNTP

WIRED INTERFACES

ETHERNET

PORTS	(2) RJ-45; 10/100 Mbps (auto-sensing)
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SERIAL

PORTS	(1) DB-9 DTE
STANDARD	RS-232/422/485
SIGNAL SUPPORT	TXD, RXD, RTS, CTS, DTR, DCD, DSR, RI
FLOW CONTROL	Software (XON/XOFF), hardware supported

I/O

CONNECTOR	12-pin screw down terminal block
DIGITAL	0-30 VDC, 200 mA max.; (4) I/O, software-selectable; pulse counter input
ANALOG	(4) analog I/O; 4-20 mA or 0-10 V, software-selectable; 12-bit resolution

USB

PORTS	(1) USB 2.0 Type A; 5 V 500 mA max
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PHYSICAL

DIMENSIONS (L X W X H)	12.8 cm x 10 cm x 5.2 cm (5.04 in x 3.94 in x 2.05 in)
WEIGHT	0.5 kg (1.1 lb)
STATUS LEDS	Signal Strength (5), LTE, Power
ENCLOSURE/RATING	Aluminum / IP30
MOUNTING	DIN rail mount
POWER REQUIREMENTS	
POWER INPUT	9 – 30 VDC, 18 W min power source required
POWER CONNECTOR	Screw down removable terminal block
POWER CONSUMPTION	4 W typical (idle); 12 W typical (peak Tx/Rx)
ENVIRONMENTAL	
HAZARDOUS (CLASS 1 DIV 2)	Yes
OPERATING TEMPERATURE	-34° C to 74° C (-29° F to 165° F); reduced cellular performance may occur above 60° C (140° F)
STORAGE TEMPERATURE	-40° C to 85° C (-40° F to 185° F)
ETHERNET ISOLATION	1.5 kV RMS
SERIAL PORT PROTECTION (ESD)	15 kV
RELATIVE HUMIDITY	5% to 95% (non-condensing)


SPECIFICATIONS

DIGI IX30

APPROVALS

CELLULAR IX30-00P7: PTCRB, Verizon, T-Mobile, AT&T, FirstNet Capable™; IX30-00G4: CE, RED, UKCA

SAFETY

Hazardous locations: ANSI/ISA-12.12.01-2015, CAN/CSA C22.2 NO.213-15
 Ordinary locations: UL 62368-1, 2nd Edition, 2014-10-14; UL 62368: 2014, 2nd Edition
 ATEX standards: Protection method  II 3 G Ex nA IIC T4 Gc
 EN 60079-0:2012+A11:2013, EN 60079-15:2010, DEMKO 15 ATEX 1574X Rev. 1

IECEX STANDARDS

US/UL/ExTR17.0077/00

EMISSIONS/IMMUNITY

CE, RED, FCC Part 15 Subpart B, ICES-003, AS/NZS CISPR 32

ENVIRONMENTAL

ROHS3

WARRANTY

PRODUCT WARRANTY 3-year*

*Standard 3-year warranty upgradeable to 5 years with purchase of a Digi Remote Manager Premier 5-year subscription applicable to the product purchased only at the time of product purchase and with product registration at that time in Digi Remote Manager.

ENTERPRISE SOFTWARE

DESCRIPTION

PROTOCOL SUPPORT

HTTPS, TLS, SCP (client and server), SFTP, SNMP (v3), SSH, Telnet and CLI for web management; remote management via [Digi Remote Manager](#)®; protocol analyzer, ability to capture PCAP for use with Wireshark; DynDNS, Dynamic DNS client compatible with No-IP/DynDNS; Captive portal, Intelliflow; Nagios, DNS server, NTP server, Multicast, mDNS, IPerf

SECURITY/VPN

IP filtering, stateful inspection firewall with scripting, address and port translation; VPN: IPsec with IKEv1, IKEv2, NAT Traversal; SSLv3, FIPS 197, Open VPN client and server; L2TP; VPN tunnels; cryptology: SHA-1, MD5, RSA; encryption: DES, 3DES and AES up to 256-bit (CBC mode for IPsec); authentication: RADIUS, TACACS+, SCEP for X.509; certificates; content filtering (via 3rd party); MAC address filtering; VLAN support

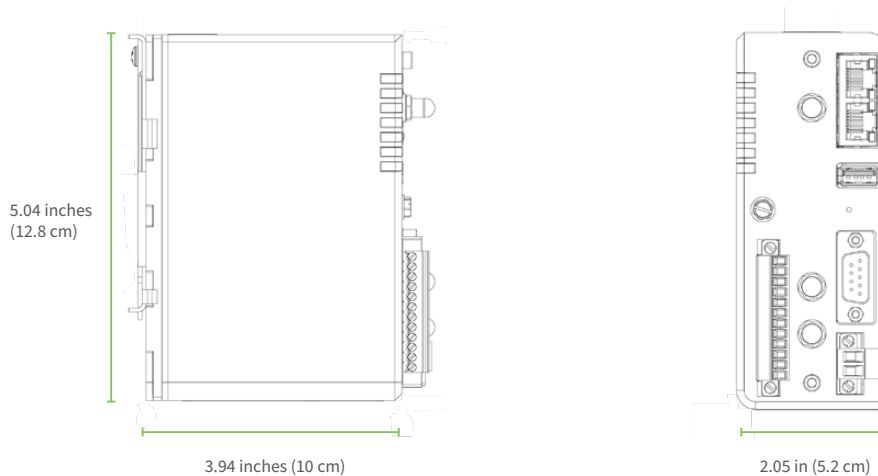
ROUTING/FAILOVER

IP pass-through; NAT, NAPT with IP port forwarding; Ethernet bridging; GRE; multicast routing; routing protocols: PPP, PPPoE, RIP (v1, v2) OSPF, BGP, iGMP routing (multicast); IP failover: VRRP, VRRP+TM; automatic failover/failback to second GSM network/standby APN; [Digi SureLink](#)®

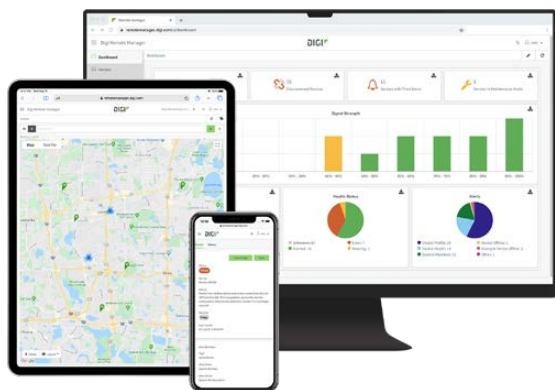
OTHER PROTOCOLS

DHCP; Dynamic DNS client compatible with No-IP/DynDNS; QoS via TOS/DSCP; Modbus UDP/TCP to serial; Modbus bridging for connecting diverse field assets

PRODUCT IMAGES



DIGI ACCELERATED LINUX (DAL OS) AND DIGI REMOTE MANAGER®



DAL OS

DAL OS is Digi's standard operating system integrated into Enterprise (EX), Industrial (IX) and Transportation (TX) routers, console servers and USB-connected devices.

Developed for speed and simplicity, DAL OS enables advanced capabilities that support today's demanding applications.

Learn more at www.digi.com/DAL

DIGI REMOTE MANAGER

Digi Remote Manager is the technology platform that brings networks to the next level, allowing networks — and the people who manage them — to work smarter. With Digi Remote Manager you can transform a multitude of dispersed IoT devices into a dynamic, intelligent network. Now you can easily deploy, monitor and diagnose thousands of mission-critical devices from a single point of command — on your desktop, tablet or phone. All the while, its software-defined security diligently safeguards your entire Digi ecosystem.

Learn more at www.digi.com/digi-remote-manager

CAPABILITIES

- DAL OS with Digi Remote Manager: remote console access, Profile Configuration Manager, HTTP proxy, device event logs, configurable maintenance window
- I/O ports: pulse counter, custom Digi device Python library
- Serial: Digi RealPort®, Modbus, serial-over-TCP/UDP
- Customization: Python 3, Python pip, PyCharm integration, shell scripting, containers, MQTT Client
- Troubleshooting tools: iPerf and nuttcp bandwidth testing, Find Me tool
- GNSS: NMEA/TAIP location forwarding to multiple servers, geo-fencing
- Activate, monitor and diagnose your mission-critical devices from a single point of command and control
- Schedule key operations — including firmware updates and file management — on a single device or on a group of devices, keeping your network functionality up-to-date and maintaining compliance standards
- Manage edge devices out-of-band via console terminal access
- Keep tabs on device health and connectivity across device deployments of any size
- Create detailed reports and enable real-time alerts for specified conditions
- Integrate device data through open APIs to gain deeper insights and control with third-party applications
- Report and alert on performance statistics, including connection history, signal quality, latency, data usage and packet loss

INFRASTRUCTURE

- Hosted in a commercial-grade cloud server environment that meets SOC 1®, SOC 2® and SOC 3® standards
- Superior availability, operating to 99.9% or greater
- Open APIs available to support application development

SECURITY

- More than 175 security controls in place to protect your data
- Member of the Center for Internet Security® (CIS®)
- Enables compliance with security frameworks like ISO27002, HIPAA, NIST and more
- Earned Skyhigh's CloudTrust™ Program highest rating of Enterprise-Ready

DIGI TRUSTFENCE®



Digi TrustFence is a device-security framework that simplifies the process of securing connected devices.

BUILT-IN SECURITY. DELIVERED.

Designed for mission-critical applications, Digi TrustFence® enables you to easily integrate device security, device identity, and data privacy capabilities into your product design. Digi TrustFence designs security into IoT devices that can grow and adapt with new and evolving threats.

Learn more at www.digi.com/trustfence

SECURE BOOT

- Programs and code running on the device are validated to be from an approved source or manufacturer.

PROTECTED HARDWARE PORTS

- Internal and external I/O ports are hardened and access-controlled to prevent unwanted local intrusion.

AUTHENTICATION

- Digi TrustFence provides data authentication and device identity management options. Furthermore, TrustFence ensures that products are not shipped with default user and password settings.

SECURE CONNECTIONS

- Digi TrustFence utilizes the latest encryption protocols for data in motion and over-the-air (OTA) transmissions to ensure the integrity of data flowing across a network.

ONGOING MONITORING AND SUPPORT

- Digi provides ongoing threat measurement and monitoring services and performs external security audits and proactively communicates with customers regarding upcoming threats.