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 — easy to deploy and centrally managed via **Digi Remote Manager®** (Digi RM), which is included in your **Digi 360** solution. (See page 2.)

Gain critical insights into your deployed devices and manage your network with Digi RM — the command center for your deployment. Digi RM is a cloud-based solution that facilitates easy setup, mass configuration, maintenance and visibility into the health of your network, whether you deploy dozens or thousands of devices. Digi RM also provides secure terminal access for out-of-band management of edge devices via serial port and command-line interface.
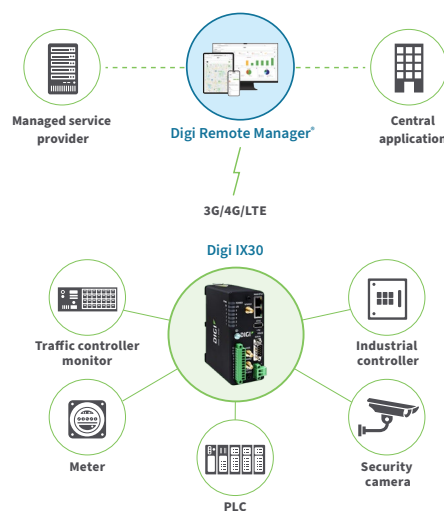
Software-defined, multi-carrier networking and global LTE and HSPA+ options make it easy to get connected. This drop-in connectivity gives operators a way to reduce downtime and service calls, and also increase revenue by bringing distributed sites online faster. With its hardened components and low-power feature, it can be configured and installed anywhere — in the harshest conditions, and in applications where power is limited or unavailable.

The Digi IX30 router offers an Anterix™ Active model designed to meet the critical demands for private LTE communications, with **FirstNet Capable™** support for emergency communications. Digi IX30 provides substantial capabilities for real-time data processing, edge computing and advanced precision. **Digi Containers** facilitate cost-effective applications, providing additional flexibility and scalability for industrial uses and private LTE deployments. Additional industrial use case applications 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.

Key features, benefits and applications

- Global LTE and HSPA+ support and certification on major carriers
- Integrated industrial edge computing capabilities for hosting containerized applications and custom solutions
- Support for Anterix, CBRS and AT&T FirstNet® for Private LTE networking deployments
- Integrated industrial edge computing capabilities for hosting containerized applications and custom solutions
- Ethernet, serial I/O and Modbus bridging
- Low-power feature for remote and off-grid applications
- Extremely resilient cellular connection through Digi's patented **Digi SureLink®**, VRRP+ protocol and dual SIM slots
- GNSS receiver for GPS, GLONASS, BeiDou and Galileo
- License-free enterprise software: VPN, firewall, logging and authentication
- Rugged enclosure, optimized for DIN rail or shelf mounting
- C1D2 and ATEX rated; NEMA TS2 temperature rated
- Includes the **Digi 360** solution with warranty, customer care and **Digi Remote Manager** cloud management, enabling easy setup, mass configuration and management
- Value-added services include **Digi Containers** to enable powerful, cost-efficient applications and **Digi WAN Bonding** for WAN aggregation and immediate failover

Application example

Managed service provider

Digi Remote Manager®

Central application

3G/4G/LTE

Digi IX30

Traffic controller monitor

Industrial controller

Meter

PLC

Security camera

Related Digi industrial IoT software and solutions

Digi IX10   Digi IX20   Digi IX40   Digi IX15   Digi Remote Manager®

Digi 360

Digi 360 offers comprehensive IoT packaged solutions, including purpose-built devices, software and services to help customers optimize their IoT investments and maximize ROI. These solutions are designed to simplify IoT complexity, and ease the challenges enterprises face in configuring, deploying and managing their IoT initiatives. Your Digi 360 subscription is included with the purchase of **Digi IX30**, complete with Digi Remote Manager, warranty and customer care. **Learn more at digi.com/digi360**.

Management
Digi Remote Manager®, our network orchestration platform, provides complete visibility and control, with configuration, remote monitoring, automation, security and OTA software update capabilities.

Device
High-performanace, purpose-built Digi devices, with integrated software, designed to meet the requirements of a wide range of enterprise, industrial, medical and transportation use cases.

Warranty
Device warranty covering the full length of the Digi 360 subscription, to help customers maximize their technology investment while limiting risk.
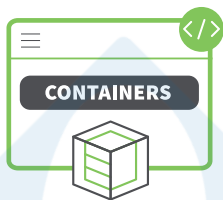
Customer Care
The support plan provides 24 x 7 x 365 tier 1 support with 4-hour SLA for device and network troubleshooting to ensure customers can resolve issues quickly.

360

Value-Added Services

Digi Containers

CONTAINERS

Digi Remote Manager enables deployment of custom applications via containers

Digi Containers simplify and centralize the process of building, deploying and running custom applications on devices managed with **Digi Remote Manager** as the central portal. Containers with custom programs or Python applications can be loaded via Digi RM on any device running the **Digi Accelerated Linux** operating system (DAL OS).

As an add-on service to Digi Remote Manager, Digi Containers are a powerful capability implemented via Lightweight Linux Containers (LXC). LXC tools enable developers to package up a custom application, with its dependencies and configuration, into a lightweight, portable bundle that shares only the running kernel with the host device.

Digi WAN Bonding

WAN BONDING

Resilient connectivity and maximum performance across multiple connections

Digi WAN Bonding combines multiple connections into a seamless and resilient connectivity solution that ensures optimal performance and maximum uptime anywhere around the world.

Digi devices provide a range of connectivity options including cellular failover with features such as **Digi SureLink**, policy-based routing and interface bonding. These features are excellent at preventing any external network failures from causing downtime.

*Digi Containers and Digi WAN Bonding are available as value-added services with Digi Remote Manager.

Digi 360 Management and Security

Digi Accelerated Linux (DAL OS)

DAL OS is Digi's standard operating system integrated into Digi **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 digi.com/DAL**.

Digi Remote Manager (Digi RM)

Digi Remote Manager is a proven technology platform that brings networks to the next level, empowering networks — and the people who manage them — to work smarter. Digi RM transforms a multitude of dispersed IoT devices into a dynamic, intelligent network. It's easy to deploy, monitor and diagnose thousands of mission-critical devices from a single point of command on a desktop, tablet or phone. All the while, software-defined security diligently safeguards your entire Digi ecosystem. **Learn more at digi.com/digi-remote-manager**.

Digi RM infrastructure and security

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

The Digi TrustFence device security framework simplifies the process of securing multiple connected devices.

Designed for mission-critical applications, **Digi TrustFence** enables users to easily integrate device security, device identity, and data privacy capabilities into product design.

Digi TrustFence security for IoT devices is designed to grow and adapt with new and evolving threats.

Learn more at digi.com/trustfence.

DAL OS and Digi RM capabilities

- **DAL OS with Digi Remote Manager:** Remote console access, configuration templates, HTTP proxy, device event logs, configurable maintenance window
- **Serial:** Modbus, serial-over-TCP/UDP
- **Customization:** Python 3, Python pip, PyCharm integration, shell scripting, containers, MQTT client
- **Troubleshooting:** iPerf and nuttcp bandwidth testing, Find Me tool
- **GNSS:** NMEA/TAIP location forwarding to servers, geo-fencing
- Activate, monitor and diagnose your mission-critical devices through a single portal
- 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
- Monitor equipment health and connectivity across deployments
- Create detailed reports and 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

Built-in Security. Delivered.

- **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 intrusion
- **Authentication:** Data authentication and device identity management options, with updated user and password settings
- **Secure connections:** Latest encryption protocols for data in motion and over-the-air (OTA) transmissions to ensure integrity
- **Ongoing monitoring and support:** Ongoing threat measurement and monitoring services, with external security audits

Specifications

Manage and configure Digi IX30
with Digi Remote Manager

Specifications	Digi IX30 with Digi 360*
WIRELESS INTERFACES	
CELLULAR**	
IX30-00P7: 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 (CBRS); WCDMA: B2, B4, B5; GNSS: GPS, GLONASS, BeiDou, Galileo, QZSS
IX30-0EG4: FIRSTNET CAPABLE™ LTE CAT 4 GLOBAL / ANTERIX™ ACTIVE (SELECT REGIONS / CARRIERS**)	LTE Cat 4 — FDD: B1, B2, B3, B4, B5, B7, B8, B8_US (Anterix), B12, B13, B14 (FirstNet®), B18, B19, B20, B25, B26, B28; WCDMA: B1, B2, B4, B5, B6, B8, B19; GSM: B2, B3, B5, B8; GNSS: GPS, GLONASS, BeiDou, Galileo, QZSS
IX30-00G4: LTE CAT 4 EMEA / ANZ / LATAM (SELECT REGIONS / CARRIERS**)	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
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 AND MANAGEMENT*	
REMOTE MANAGEMENT	**Digi Remote Manager**; SNMP v1/v2c/v3 (user installed/managed), SMS
LOCAL MANAGEMENT	WebUI (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)
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 inputs; 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
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

*Includes the **Digi 360** solution for **Digi IX30** (1-year) with **Digi Remote Manager**, **warranty** and **customer care**.
Visit **digi.com/resources/certifications for latest approvals and updates.

DIGI®

Specifications and Technologies

Manage and configure Digi IX30 with Digi Remote Manager

Specifications	Digi IX30 with Digi 360*
POWER REQUIREMENTS	
POWER INPUT	9 - 30 VDC, reverse polarity protection, 18 W min power source required
POWER CONNECTOR	Screw down removable terminal block
POWER CONSUMPTION	1.5 W (light traffic flow), 3.5 W (peak data transmission); 1 W (low power mode, idle traffic, no serial/no Ethernet WAN)
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)
APPROVALS**	
CELLULAR	IX30-00P7: FCC, PTCRB, Verizon, T-Mobile, AT&T, FirstNet Capable™; IX30-00G4: CE, RED, UKCA; IX30-0EG4: FCC, PTCRB, Verizon, AT&T, FirstNet Capable™, Anterix™ Active; visit digi.com/resources/certifications for latest cellular approvals and updates
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 ⟨Ex⟩ 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; AU/NZS CISPR32
ENVIRONMENTAL	ROHS3
WARRANTY***	
PRODUCT WARRANTY	1-year

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***Product warranty can be extended with **Digi 360** extensions or renewals.

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	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

*For a comprehensive list of operating system features, please visit digi.com/solutions/by-technology/dal-operating-system/features.

DIGI®

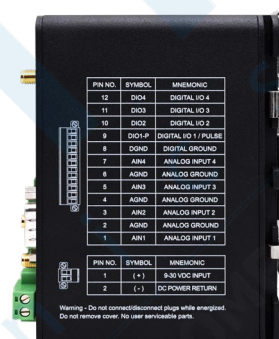# Product Photos and Technologies
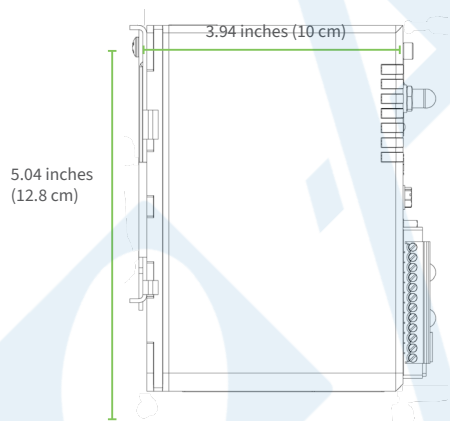
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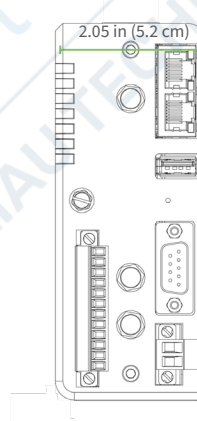
Digi IX30

Digi IX30 — front

Digi IX30 — left

Digi IX30 — right

Digi IX30 — left side (with dimensions)

3.94 inches (10 cm)

5.04 inches (12.8 cm)

Digi IX30 — front (with dimensions)

2.05 in (5.2 cm)

Featured technologies

FIRSTNET. Built with AT&T

Anterix

OnGo

Part Numbers

Part Numbers	Digi IX30 with Digi 360*
DIGI IX30 — LTE-ADVANCED CAT 7	
IX30-00P7	Digi IX30 — FirstNet Capable LTE-Advanced Cat 7 North America, dual Ethernet, RS-232/422/485, GNSS
DIGI IX30 — LTE CAT 4	
IX30-0EG4	Digi IX30 — FirstNet Capable LTE Cat 4 global (select regions/carriers)**, 3G/2G fallback, dual Ethernet, RS-232/422/485, GNSS, edge computing
IX30-00G4	Digi IX30 — LTE Cat 4 EMEA/ANZ/LATAM (select regions/carriers)**, 3G/2G fallback, dual Ethernet, RS-232/422/485, GNSS

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Part Numbers	Available Accessories**
76002113	Digi IX30 Accessory Kit — PSU, antennas, Cat 6 Ethernet cable, GPS antenna
76002104	Power supply — 18 VDC, 1 A, wall mount level VI, industrial temperature, changeable plug tips, 2-pin combicon screw terminal plug
76002117	Power supply — 18 VDC, 1 A, wall mount level VI, commercial temperature, changeable plug tips, 2-pin combicon screw terminal plug
76002114	Antenna — 5G/LTE 600 MHz - 6 GHz, swivel, black
76000954	Antenna base — SMA, 1 m, RG174
76002106	Cable — UTP, Cat 6, 2 m (6 ft), black, flat patch cable

**Sold separately, unless otherwise noted.

Part Numbers	Digi 360 Extensions and Renewals
DIGI360-IX30-EXT-2YR	Digi 360 extension for two additional years for Digi IX30
DIGI360-IX30-EXT-4YR	Digi 360 extension for four additional years for Digi IX30
DIGI360-IX30-REN-1YR	Digi 360 renewal for one additional year for Digi IX30
DIGI360-IX30-REN-3YR	Digi 360 renewal for three additional years for Digi IX30
DIGI360-IX30-REN-5YR	Digi 360 renewal for five additional years for Digi IX30

Part Numbers	Value-Added Services
DIGI-RM-PRM-CS	Digi Containers subscription — 1-year subscription
DIGI-SRV-WB-TIER1-1YR	Digi WAN Bonding subscription with 100 Mbps max throughput — 1-year subscription
DIGI-SRV-WB-TIER2-1YR	Digi WAN Bonding subscription with 200 Mbps max throughput — 1-year subscription
DIGI-SRV-WB-TIER3-1YR	Digi WAN Bonding subscription with 1 Gbps max throughput — 1-year subscription

For more information, please visit **digi.com**.

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