Manage this device with
Digi Remote Manager

FIRSTNET®
Built with AT&T

DIGI IX20

Versatile networking for critical applications — rugged, secure LTE router

Digi IX20 is a full-featured cellular router that scales from general connectivity applications to industrial routing and security. Its flexible power and connectivity options make it a versatile choice for use in industrial infrastructure, digital signage, retail kiosks, service terminals and other critical assets with a need for secure transactions.

The high-performance architecture of the Digi IX20 router provides automatic and software-selectable primary and backup WWAN connectivity over multi-carrier cellular LTE. Digi IX20 supports advanced security (stateful firewall, MAC filtering and VPN), cellular redundancy (Digi SureLink®) and management (SNMP, event logging, analyzer trace and QOS), facilitating use in PCI or NERC-CIP compliant applications. FirstNet Trusted™ models are designed to meet the demands of primary responders for critical communications.

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, mass configuration, maintenance and support, even for thousands of devices. In the event of an interruption to your primary network connection, Digi RM also provides secure, out-of-band management access to Digi IX20 through a serial port and command-line interface. Digi WAN Bonding provides WAN aggregation and immediate failover.

The Digi IX20 family of routers includes multiple options and models for global distribution and deployment. In addition, Digi IX20 is designed for Digi CORE® plug-in LTE modems that can be easily changed out or upgraded without replacing the entire router.
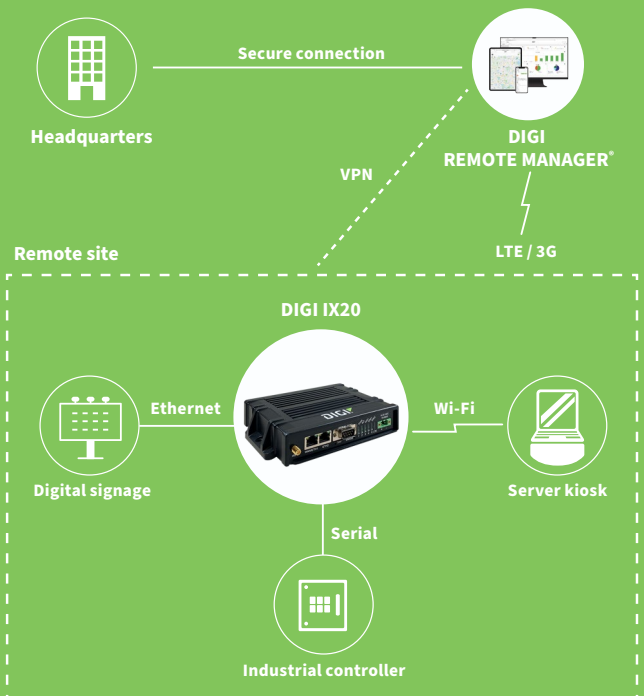
FEATURES AND BENEFITS

– Compact and economical cellular routing platform with industrial feature set

– Redundant connectivity with dual SIMs and Digi SureLink

– FirstNet Trusted™ models for first responder communications

– Global bands support and options for global distribution, deployment and management

– Built-in Digi TrustFence® for device security, secure encrypted connections, ongoing monitoring and support

– Digi Remote Manager platform for easy setup, mass configuration and out-of-band management

– Dual Ethernet ports and single serial (RS-232) port

APPLICATION EXAMPLE

Headquarters — Secure connection — DIGI REMOTE MANAGER®

VPN

LTE / 3G

Remote site

DIGI IX20

Digital signage — Ethernet — Wi-Fi — Server kiosk

Serial

Industrial controller

RELATED PRODUCTS

Digi IX10

Digi IX15

Digi EX15

Digi Connect Sensor+

Digi Remote Manager

SPECIFICATIONS	DIGI IX20
CELLULAR*	
CERTIFICATIONS	Visit www.digi.com/resources/certifications for latest certifications
LTE-A (07) WITH DIGI CORE PLUG-IN LTE MODEM 1003-CM07-OUS**	LTE-Advanced Cat 7 (North America): B2, B4, B5, B7, B12, B13, B14 — FirstNet®, B25, B26, B41, B42, B43, B48, B66, B71; 3G: B2, B5; Transfer rate (max): 300 Mbps down, 150 Mbps up; Industrial temperature
LTE (G4) WITH DIGI CORE PLUG-IN LTE MODEM 1002-CMG4-GLB**	LTE Cat 4 (Global): B1, B2, B3, B4, B5, B7, B8, B12, B13, B18, B19, B20, B25, B26, B28, B38, B39, B40, B41; 3G: B1, B2, B4, B5, B6, B8, B19; 2G: 850 / 900 / 1800 / 1900 MHz; Transfer rate (max): 150 Mbps down, 50 Mbps up; Industrial temperature
LTE (G4) WITH DIGI CORE PLUG-IN LTE MODEM 1002-CMG4-GLB-G**	LTE Cat 4 (EMEA): B1, B2, B3, B4, B5, B7, B8, B12, B13, B18, B19, B20, B25, B26, B28, B38, B39, B40, B41; 3G: B1, B2, B4, B5, B6, B8, B19; 2G: 850 / 900 / 1800 / 1900 MHz; Transfer rate (max): 150 Mbps down, 50 Mbps up; Industrial temperature
LTE (N4/P4) WITH DIGI CORE PLUG-IN LTE MODEM 1002-CMF4-OUS**	LTE Cat 4 (North America): B2, B4, B5, B12, B13, B14 — FirstNet®, B66, B71; 3G: B2, B4, B5; Transfer rate (max): 150 Mbps down, 50 Mbps up; Industrial temperature
LTE (45) WITH DIGI CORE PLUG-IN LTE MODEM 1002-CM45-OEU**	LTE Cat 4 (EMEA); LTE Bands: B3, B7, B20, B31, B72; 450 MHz support; Transfer rate (max): 150 Mbps down, 50 Mbps up; Industrial temperature
LTE (M1) WITH DIGI CORE PLUG-IN LTE MODEM 1002-CMM1-GLB**	LTE Cat M1 / NB1 (North America): B1, B2, B3, B4, B5, B8, B12, B13, B18, B19, B20, B26, B28; 2G: 850 / 900 / 1800 / 1900 MHz; Transfer rate (max): M1: 300 kbps down, 375 kbps up; NB1: 21 kbps down, 62.5 kbps up; 2G: 296 kbps down, 236 kbps up; Industrial temperature
CONNECTORS	(2) 50 Ω SMA (center pin: female)
SIM SLOTS	(2) Mini-SIM (2FF)
SIM SECURITY	Secured in cellular module
GNSS (1003-CM07 / 1002-CMG4-G)	GPS, GLONASS, BeiDou, Galileo, QZSS; Connector: 50 Ω SMA (center pin: female); 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
WI-FI	
MODULE	1 x 1 SISO dual-band 802.11a/b/g/n/ac (2.4 GHz / 5 GHz)
AUTHENTICATION	TACACS+, Enterprise RADIUS
MODES	Client mode and access point mode simultaneously
CLIENTS	Maximum 10 clients (access point mode: regardless of combination of clients and access points)
ACCESS POINTS	Maximum 2 access points (access point mode: regardless of combination of clients and access points)
SECURITY	WPA/WPA-2 personal, WPA/WPA-2 enterprise
CONNECTORS	(1) 50 Ω SMA (center pin: male)
SOFTWARE AND MANAGEMENT	
REMOTE MANAGEMENT	Digi Remote Manager; SNMP v2/v3 (user installed/managed)
LOCAL MANAGEMENT	Web UI (HTTP/HTTPS); CLI (Telnet, SSH)
MANAGEMENT/ TROUBLESHOOTING TOOLS	FTP client, SCP; protocol analyzer with PCAP for Wireshark; event logging with syslog and SMTP client; NTP/SNTP; Nagios, Intelliflow, iPerf, Dynamic DNS, ping, traceroute
MEMORY	256 MB RAM, 256 MB flash
ETHERNET	
PORTS	(2) RJ-45; 10/100 Mbps (auto-sensing)
SERIAL	
PORTS	(1) DB9M; RS-232 DTE; signal support TXD, RXD, CTS, DTR, DCD, flow control software (XON/OFF), hardware supported (CTS/RTS)
PHYSICAL	
DIMENSIONS (L x W x H)	107 mm x 162 mm x 35 mm (4.21 in x 6.38 in x 1.38 in)
WEIGHT	0.65 kg (1.4 lb)
STATUS LEDs	Power, Internet, Wi-Fi, SIM 1, SIM 2, signal strength (5), LTE
ENCLOSURE	Glass-filled polyphenylene sulphide (PPS) / IP30
POWER REQUIREMENTS	
POWER INPUT	9 - 30 VDC, 1.0 A maximum; Connector: 2-position rewireable plug with securing screws included
POWER CONSUMPTION	1.5 W (light traffic flow), 3.5 W (peak data transmission); 1.4 W (low power mode, idle traffic, no Ethernet WAN)
ENVIRONMENTAL	
OPERATING TEMPERATURE	Models with Wi-Fi: −20 °C to 70 °C (−4 °F to 158 °F); Models without Wi-Fi: −40 °C to 70 °C (−40 °F to 158 °F)
STORAGE TEMPERATURE	−40 °C to 85 °C (−40 °F to 185 °F)
RELATIVE HUMIDITY	5% to 95% (non-condensing)

*Digi CORE plug-in LTE modem is included with the corresponding IX20 model, with the ability to upgrade or replace the modem without replacing the router. Transfer rates are network operator dependent.
**Digi CORE 1003-CM07-OUS and 1002-CMG4-GLB-G require two cellular antennas with option for a third GNSS/GPS antenna. Digi CORE 1002-CMG4-GLB, 1002-CM45-OEU and 1002-CMF4-OUS require two cellular antennas. Digi CORE 1002-CMM1-GLB requires only one cellular antenna. Wi-Fi antenna available for Wi-Fi enabled models.

SPECIFICATIONS	DIGI IX20
ACCESSORIES	
AVAILALBLE ACCESSORIES	Accessories not included. Available accessories: industrial extended temperature or commercial power supply (required), and Wi-Fi, cellular and GPS antennas, Ethernet cable, DIN rail clip kit and DIN rail mounting bracket kit (recommended / optional)
APPROVALS	
CELLULAR	Visit www.digi.com/resources/certifications for latest cellular certifications
SAFETY	IEC62368-1, CB, EN62311
ENVIRONMENTAL	ROHS3
EMISSIONS / IMMUNITY	CE; RED; FCC Part 15, Subpart B; ICES-003; AU/NZS CISPR32
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, FTP client, TLS v1.2, SCP (client and server), SFTP, SMTP client for use by scripts and the command line, SNMP (v2/v3), SSH; remote management via Digi Remote Manager; Protocol analyzer, ability to capture PCAP for use with Wireshark; DynDNS; Dynamic DNS client compatible with BIND9/No-IP/DynDNS; Captive portal, Intelliflow; Nagios, DNS server, NTP server, multicast, mDNS, IPerf
SECURITY	IP filtering, stateful firewall, custom firewall rules (iptables), address and port translation; TLS 1.2 and above, FIPS 197, open VPN client and server; VPN tunnels; Authentication: RADIUS, TACACS+; certificates; MAC address filtering; VLAN support
VPN	IPSec with IKEv1, IKEv2, NAT Traversal; OpenVPN client and server; GRE VPN tunnels; Cryptology: SHA-1/256/384/512, MD5, RSA; Encryption: 3DES and AES up to 256-bit (CBC mode for IPsec); Diffie Hellman: DH groups 1-32 (CURVE448)
ROUTING / FAILOVER	IP pass-through; NAT, NAPT with IP port forwarding; Ethernet bridging; GRE; multicast routing; Routing protocols: RIP (v1, v2) OSPF, BGP; IP failover: VRRP; automatic failover, Digi SureLink
OTHER PROTOCOLS	DHCP; dynamic DNS client compatible with No-IP/DynDNS

PRODUCT IMAGES*

IX20 WITH CELLULAR, GPS AND WI-FI ANTENNAS

### IX20 WITH GPS AND CELLULAR ANTENNAS

IX20 FRONT

IX20 BACK

*Digi CORE 1003-CM07-OUS and 1002-CMG4-GLB-G require two cellular antennas with option for a third GNSS/GPS antenna. Digi CORE 1002-CMG4-GLB, 1002-CM45-OEU and 1002-CMF4-OUS require two cellular antennas. Digi CORE 1002-CMM1-GLB requires only one cellular antenna. Wi-Fi antenna available for Wi-Fi enabled models.

DIGI

DIGI REMOTE MANAGER
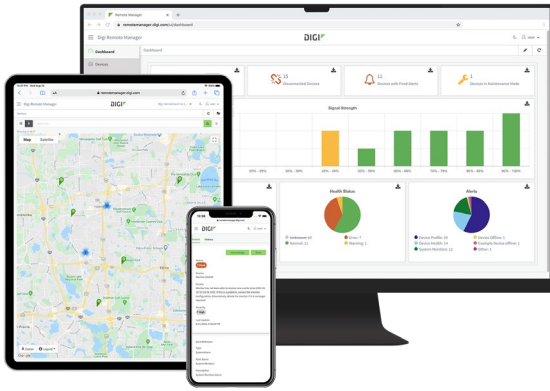
Digi Remote Manager is the technology platform that brings networks to the next level, allowing networks — and the people who manage them — to work smarter. With Digi Remote Manager you can transform a multitude of dispersed IoT devices into a dynamic, intelligent network. Now you can easily deploy, 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

– 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

– Comprehensive 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

PART NUMBERS	DIGI REMOTE MANAGER
DIGI-RM-STD-1YR	Digi Remote Manager Standard — 1-year subscription
DIGI-RM-PRM-1YR	Digi Remote Manager Premier — 1-year subscription
DIGI-RM-PRM-3YR	Digi Remote Manager Premier — 3-year subscription
DIGI-RM-PRM-5YR	Digi Remote Manager Premier — 5-year subscription

*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.

DIGI 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.

PART NUMBERS	DIGI WAN BONDING
DIGI-SRV-WB-TIER1-1YR	Digi WAN Bonding subscription with 100 Mbps max throughput
DIGI-SRV-WB-TIER2-1YR	Digi WAN Bonding subscription with 200 Mbps max throughput
DIGI-SRV-WB-TIER3-1YR	Digi WAN Bonding subscription with 1 Gbps max throughput

**Digi WAN Bonding is available as a subscription added to Digi Remote Manager Premier.