







### DIGI IX20



#### Cloud managed 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 Ready™ 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.

The Digi IX20 family of routers has a single part number, which simplifies inventory control for global distribution and deployment. In addition, Digi IX20 is designed for Digi CORE® plug-in LTE modems that can be 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 Ready™ models for first responder communications
- Global bands and single part number to simplify 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

## RELATED PRODUCTS Digi IX10 Digi IX15 Digi EX15 Digi Connect Digi Remote

# APPLICATION EXAMPLE Secure connection DIGI REMOTE SITE DIGI 1X20 DIGI 1X20 Digital signage Server kiosk Serial Industrial controller

SPECIFICATIONS	DIGI IX20
CELLULAR*	
CERTIFICATIONS	Visit www.digi.com/resources/certifications for latest certifications
LTE (G4) WITH DIGI CORE PLUG-IN LTE MODEM 1002-CMG4	LTE Cat 4: 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
LTE (N4/P4) WITH DIGI CORE PLUG-IN LTE MODEM 1002-CMF4	LTE Cat 4: B2, B4, B5, B12, B13, B14 (FirstNet®), B66, B71; 3G: B2, B4, B5;
LTE (M1) WITH DIGI CORE PLUG-IN LTE MODEM 1002-CMM1**	LTE Cat M1/NB1: B1, B2, B3, B4, B5, B8, B12, B13, B18, B19, B20, B26, B28; 2G: 850 / 900 / 1800 / 1900 MHz
LTE-A (16) WITH DIGI CORE PLUG-IN LTE MODEM 1002-CM16	LTE-Advanced Cat 6: B1, B3, B5, B7, B8, B18, B19, B21, B28, B38, B39, B40, B41; 3G: B1, B5, B6, B8, B9, B19, B39;
CONNECTORS	(2) 50 $\Omega$ SMA (center pin: female)
SIM SLOTS	(2) Mini-SIM (2FF)
SIM SECURITY	Secured in cellular module
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	
SOFTWARE AND MANAGEMENT	(1) 50 $\Omega$ SMA (center pin: male)
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	2.5 W typical (idle); 6 W typical (peak Tx/Rx)
ENVIRONMENTAL	
OPERATING TEMPERATURE	Models with Wi-Fi: -20° C to 70° C (-4° F to 158° F)
The state of the s	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)



<sup>\*</sup>Transfer rates are network operator dependent.

\*\*Digi CORE 1002-CMM1 requires only one cellular antenna.

SPECIFICATIONS	DIGI IX20
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*

<sup>\*</sup>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, SSL, 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**

#### **FRONT**



#### **BACK**



#### **WITH ANTENNAS**







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 — on your desktop or mobile app
- 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<sup>®</sup>, SOC 2<sup>®</sup> and SOC 3<sup>®</sup> 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

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

PART NUMBERS	DIGI IX20 - PRIMARY RESPONDER
IX20-WAP4	Digi IX20W-PR - Primary Responder (FirstNet) LTE Cat 4 North America, Wi-Fi, (2) Ethernet, DB-9 RS-232; includes DIN rail clip, power supply, (2) cellular antenna, Wi-Fi antenna and Ethernet cable
IX20-W0P4	Digi IX20W-PR - Primary Responder (FirstNet) LTE Cat 4 North America, Wi-Fi, (2) Ethernet, DB-9 RS-232
IX20-0AP4	Digi IX20-PR - Primary Responder (FirstNet) LTE Cat 4 North America, (2) Ethernet, DB-9 RS-232; includes DIN rail clip, power supply, (2) cellular antenna and Ethernet cable
IX20-00P4	Digi IX20-PR - Primary Responder (FirstNet) LTE Cat 4 North America, (2) Ethernet, DB-9 RS-232

PART NUMBERS	DIGI IX20
IX20-WA16	Digi IX20W - LTE Cat 6 AU/NZ, Wi-Fi, (2) Ethernet, DB-9 RS-232; includes DIN rail clip, power supply, (2) cellular antenna, Wi-Fi antenna and Ethernet cable
IX20-WAG4	Digi IX20W - LTE Cat 4 Global, Wi-Fi, (2) Ethernet, DB-9 RS-232; includes DIN rail clip, power supply, (2) cellular antenna, Wi-Fi antenna and Ethernet cable
IX20-0AG4	Digi IX20 - LTE Cat 4 Global, (2) Ethernet, DB-9 RS-232, includes DIN rail clip, power supply, (2) cellular antenna and Ethernet cable
IX20-W0G4	Digi IX20W - LTE Cat 4 Global, Wi-Fi, (2) Ethernet, DB-9 RS-232
IX20-00G4	Digi IX20 - LTE Cat 4 Global, (2) Ethernet, DB-9 RS-232
IX20-WAN4	Digi IX20W - LTE Cat 4 North America, Wi-Fi, (2) Ethernet, DB-9 RS-232; includes DIN rail clip, power supply, (2) cellular antenna, Wi-Fi antenna and Ethernet cable
IX20-0AN4	Digi IX20 - LTE Cat 4 North America, (2) Ethernet, DB-9 RS-232, includes DIN rail clip, power supply, (2) cellular antenna and Ethernet cable
IX20-W0N4	Digi IX20W - LTE Cat 4 North America, Wi-Fi, (2) Ethernet, DB-9 RS-232
IX20-00N4	Digi IX20 - LTE Cat 4 North America, (2) Ethernet, DB-9 RS-232
IX20-WAM1	Digi IX20W - LTE Cat M1 Global, Wi-Fi, (2) Ethernet, DB-9 RS-232; includes DIN rail clip, power supply, (1) cellular antenna, Wi-Fi antenna and Ethernet cable
IX20-0AM1	Digi IX20 - LTE Cat M1 Global, (2) Ethernet, DB-9 RS-232, includes DIN rail clip, power supply, (1) cellular antenna and Ethernet cable
IX20-W0M1	Digi IX20W - LTE Cat M1 Global, Wi-Fi, (2) Ethernet, DB-9 RS-232
IX20-00M1	Digi IX20 - LTE Cat M1 Global, (2) Ethernet, DB-9 RS-232

PART NUMBERS	ACCESSORIES
76002104	Power supply with plug tips for US, UK, EU, AU
76002105	Wi-Fi antenna
76002106	Ethernet cable - 2 m (6 ft)
76000926	Cellular antenna 700 MHz to 2.7 GHz
76002093	DIN rail mounting bracket kit
76002095	DIN rail clip kit
76002114	Cellular antenna 600 MHz to 6 GHz

 $First Net @ and First Net Ready ^{\texttt{m}} are \ registered \ trademarks \ and \ service \ marks \ of the \ First \ Responder \ Network \ Authority.$ 

**DIGI SERVICE AND SUPPORT** / You can purchase with confidence knowing that Digi is always available to serve you with expert technical support and our industry  $leading\ warranty.\ For\ detailed\ information\ visit\ {\color{blue}www.digi.com/support.}$ 





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