DIGI IX20

Cloud managed networking for critical applications

Digi IX20 is a full-featured cellular router that can scale from basic connectivity applications to industrial-class routing and security solutions. 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 primary and backup WWAN connectivity over software selectable multi-carrier LTE. Digi IX20 supports software features for advanced security (stateful firewall, MAC filtering and VPN), redundancy (Digi SureLink®) and management (SNMP, event logging, analyzer trace and QOS), enabling it to be used in PCI or NERC-CIP compliant applications.

Gain critical insights into your deployed devices and manage your network with Digi Remote Manager® — the command center for your deployment. Digi Remote Manager (Digi RM) is a cloud-based solution that facilitates easy setup, mass configuration, maintenance and support for hundreds or even thousands of remote Digi devices. Digi RM lets you evaluate, update and configure your Digi enterprise products — and the health of your network — at scale after deployment.

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

APPLICATION EXAMPLE

DIGI IX20

DIGI REMOTE MANAGER®

HEADQUARTERS

REMOTE SITE

DIGI IX20

Ethernet

Digital Signage

Serial

Kiosk

Industrial Controller

VPN

LTE / 3G

Digi WR11 XT  Digi WR21  Digi WR31  Digi TX54  Digi Remote Manager
## SPECIFICATIONS

### DIGI® IX20

#### CELLULAR

**CERTIFICATIONS**
Visit www.digi.com/resources/certifications for latest certifications

**LTE (G4) WITH DIGI CORE® PLUG-IN**
- 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, B13
  - 2G EDGE / GPRS: 850 / 900 / 1800 / 1900 MHz

**CONNECTORS**
- (2) 50 Ω 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**
- (1) 50 Ω SMA (center pin: male)

#### SOFTWARE AND MANAGEMENT

**REMOTE MANAGEMENT**
Digi Remote Manager®; SNMP v2/v3 (user installed/managed)

**LOCAL MANAGEMENT**
WebUI (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

**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); device performance may be impacted above 50° C (122° F)
- Models without Wi-Fi: -40° C to 70° C (-40° F to 158° F); device performance may be impacted above 50° C (122° F)

**RELATIVE HUMIDITY**
5% to 95% (non-condensing)

#### 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
### Cellular Connectivity

#### 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, IPPerf

#### 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

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### 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](http://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®, 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
## PART NUMBERS

<table>
<thead>
<tr>
<th>PART NUMBERS</th>
<th>ACCESSORIES</th>
</tr>
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<tbody>
<tr>
<td>IX20-WAG4</td>
<td>Digi IX20 - 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</td>
</tr>
<tr>
<td>IX20-0AG4</td>
<td>Digi IX20 - LTE Cat 4 Global, (2) Ethernet, DB-9 RS-232, includes DIN rail clip, power supply, (2) cellular antenna and Ethernet cable</td>
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<tr>
<td>76002104</td>
<td>Power supply with plug tips for US, UK, EU, AU</td>
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<tr>
<td>76002105</td>
<td>Wi-Fi antenna</td>
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<tr>
<td>76002106</td>
<td>Ethernet cable - 2 m (6 ft)</td>
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<tr>
<td>76000926</td>
<td>Cellular antenna</td>
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<tr>
<td>76002093</td>
<td>DIN rail mounting bracket kit</td>
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<tr>
<td>76002095</td>
<td>DIN rail clip kit</td>
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