



Digi EX50 5G

5G go-to enterprise solution for primary or backup wireless connectivity

Business has forever changed with millions of employees working remotely. The **Digi EX50** 5G cellular extender with advanced routing capabilities and 5G/4G dual connectivity provides your business with a fast, secure and resilient enterprise-grade network that changes the work-from-anywhere experience for good — easy to deploy and centrally managed via **Digi Remote Manager®** (Digi RM), which is included in your **Digi 360** solution. (See page 2.)

Digi EX50 is an ideal choice for your business as you adapt to the new normal. The small form factor of Digi EX50 makes it the 5G go-to enterprise solution where the work is happening: at the headquarters for backup connectivity, at the branch for cost-optimized primary connectivity, or at the IT-managed home office for secure, all-in-one connectivity with Wi-Fi.

Part of Digi enterprise solutions, Digi EX50 comes with industry-leading software, including **Digi Accelerated Linux** (DAL OS), **Digi TrustFence®** security framework, and the **Digi RM** configuration and management platform. These tools deliver security, reliability and system-wide management of your entire infrastructure.

Dual-SIM slots provide carrier flexibility and wireless failover, and with 4G LTE and 3G fallback, you're covered in areas where 5G is not yet deployed. The latest generation Wi-Fi 6 radios in the Digi EX50 cellular extender operate simultaneously for higher speed, capacity, quality of service and range than previous Wi-Fi products. Dual 2.5 Gigabit Ethernet ports break the Gigabit barrier and deliver 5G speeds for future-ready networks.

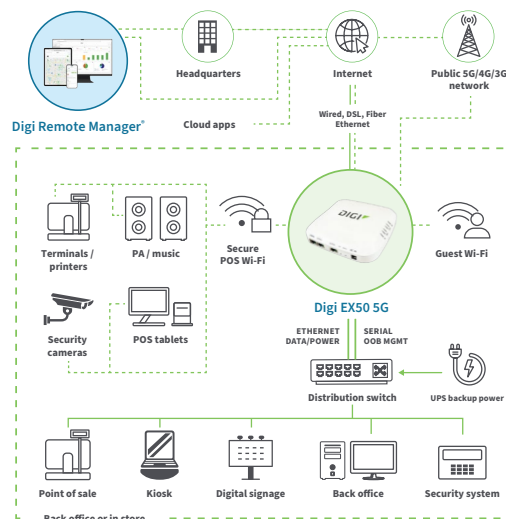
Digi EX50 supports indoor use-cases with an extended operating temperature range, such as smart factories, warehouses, construction sites or infrastructure sheds. Digi EX50 supports CBRS, C-band and **FirstNet®** for additional flexibility and use-cases including critical communications. Digi EX50 5G cellular extenders also meet the U.S. government **FIPS 140-2** cybersecurity standard.

An available serial port with Cisco straight-through pinout enables secure out-of-band management of other on-site equipment. To simplify installation, Digi EX50 can be directly powered by an active PoE+ switch or a DC IN barrel connector as the primary or backup power source for redundancy.

Key features, benefits and applications

- Future-proof and ready for new use cases such as 5G network slicing, SD-WAN, 4K/8K cameras and AR/VR
- High-speed 5G NR and 4G LTE-Advanced Pro Cat 20 dual connectivity CBRS, C-band, **FirstNet Capable™** cellular radios
- Advanced routing capabilities to help you match your use case
- Enterprise-grade Wi-Fi 6 and dual 2.5 Gigabit Ethernet
- Active PoE+ switch or DC IN for primary and backup power
- Extremely resilient cellular connection through Digi's patented **SureLink®**, VRRP+ protocol and dual SIM slots
- Extended operating temperature range for wider use-cases
- Standards-based Power over Ethernet simplifies installation
- Multiple mounting options and accessories
- Serial port for remote, out-of-band management
- 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 5G/LTE WAN aggregation with immediate failover

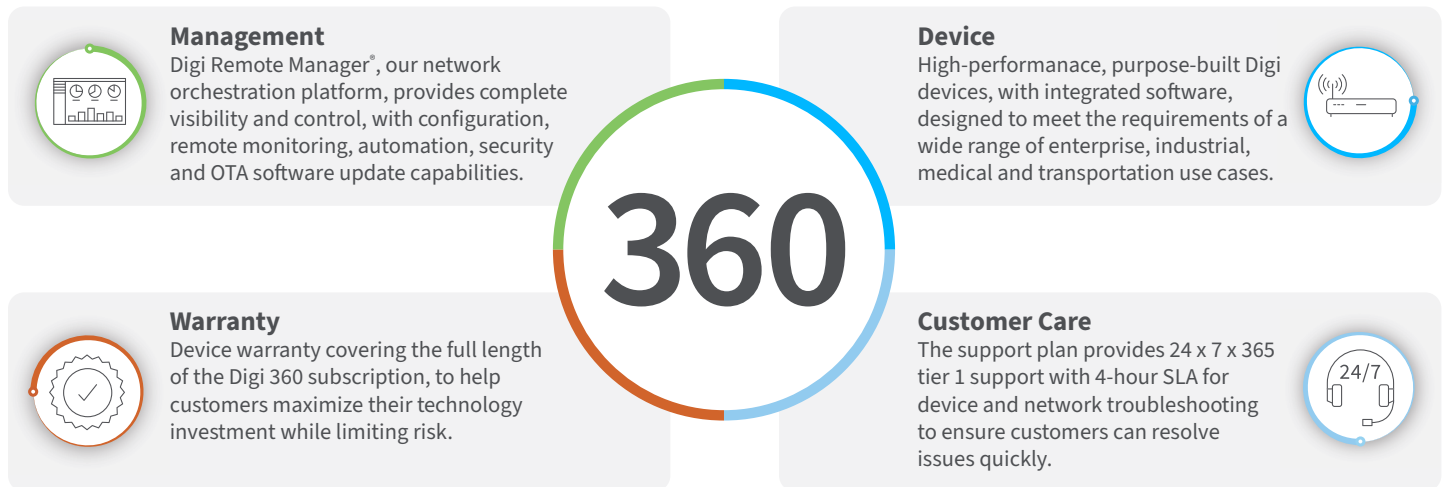
Application example



DIGI EX50 5G WITH DIGI 360

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 EX50**, complete with Digi Remote Manager, warranty and customer care. [Learn more at digi.com/digi360](https://www.digi.com/digi360).



Value-Added Services

Digi 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



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 EX50 5G WITH DIGI 360

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](https://www.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](https://www.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](https://www.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 nttcp 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

DIGI EX50 5G WITH DIGI 360

Specifications



Manage and configure Digi EX50
5G with Digi Remote Manager

Specifications	Digi EX50 5G with Digi 360*
CELLULAR CONNECTIVITY**	
5G NR	Bands: n1, n2, n3, n5, n7, n8, n12, n20, n25, n28, n38, n40, n41, n48 CBRS, n66, n71, n77 C-band, n78, n79
4G LTE-ADVANCED PRO	Bands: B1, B2, B3, B4, B5, B7, B8, B12, B13, B14 FirstNet*, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B43, B46 LAA, B48 CBRS, B66, B71
3G HSPA+	Bands: B1, B2, B4, B5, B6, B8, B9, B19
CONNECTORS	(4) 50 Ω SMA (center pin: female)
SIM SLOTS	(2) Mini-SIM (2FF); software selectable, hardware switchable; SIM slot cover plate
SOFTWARE AND MANAGEMENT*	
SOFTWARE	Digi Accelerated Linux (DAL OS); secure, reliable, intelligent, customizable
REMOTE MANAGEMENT	Digi Remote Manager (cloud based); SNMP v1/v2c/v3 (user installed/managed), SMS
LOCAL MANAGEMENT	Web Interface (HTTPS); Command Line Interface (SSH, serial port)
PERFORMANCE	
ETHERNET THROUGHPUT	2.5 Gbps
CELLULAR THROUGHPUT	1.4 Gbps
IPSEC VPN THROUGHPUT	500 Mbps
VPN TUNNELS	10 tunnels
CLIENT COUNT	50 clients (typical)
PROCESSOR	
APPLICATION PROCESSOR	Arm® Cortex®-A53, 1.8 GHz, quad-core, 64-bit
MEMORY	512 MB RAM, 512 MB flash
ETHERNET	
PORTS	(2) RJ-45; 10/100/1000/2500 Mbps (auto-sensing)
WI-FI	
RADIOS	Wi-Fi 6 / 802.11ax, enterprise-grade, dual-band simultaneous, 2x2 MIMO; 2.4 GHz: 802.11b/g/n/ax; 2.4 GHz and 5 GHz: 802.11a/n/ac/ax
ANTENNAS	Integrated 2x2 MIMO, 2.4 GHz with 8 dBi gain, 5 GHz with 5 dBi gain
SECURITY	Open, Enhanced Open, WPA, WPA2, WPA3; Personal, Enterprise
MODES	(4) Wi-Fi access points; (2) Wi-Fi clients; (50) Wi-Fi users (typical)
SERIAL	
PORTS	(1) RS-232 (RJ-45); Cisco straight-through pinout; for out-of-band management of network appliances and servers
PHYSICAL	
DIMENSIONS	158 mm x 158 mm x 35 mm (6.2 in x 6.2 in x 1.4 in)
WEIGHT	600 g (21 oz)
STATUS LEDS	(14) total for easy visual troubleshooting; Power, LAN, WAN, Wi-Fi 2.4/5, Online, Cellular Signal, Cellular Service, SIM 1/2
ENCLOSURE / RATING	Hybrid (die-cast aluminum + ABS plastic); Kensington Security Slot

*Includes the **Digi 360** solution for **Digi EX50** (1-year) with **Digi Remote Manager**, **warranty** and **customer care**.

**Visit [digi.com/resources/certifications](https://www.digi.com/resources/certifications) for latest approvals and updates.

DIGI EX50 5G WITH DIGI 360

Specifications and Technologies



Manage and configure Digi EX50 5G with Digi Remote Manager

Specifications	Digi EX50 5G with Digi 360*
POWER REQUIREMENTS	
DC BARREL INPUT	19 VDC / 2.5 A barrel connector, 2.5 mm pin, center-positive; can be used as primary or backup power source for seamless redundancy
POWER OVER ETHERNET	Standards-based, IEEE 802.3at, PoE+ (25.5 W); can be used as primary or backup power source for seamless redundancy
POWER CONSUMPTION	8 W (idle), 15 W (typical), 25 W (maximum)
ENVIRONMENTAL	
OPERATING TEMPERATURE	-30 °C to 60 °C (-22 °F to 140 °F) with Power over Ethernet or industrial-rated power supply; 0 °C to 40 °C (32 °F to 104 °F) with included commercial-rated power supply
RELATIVE HUMIDITY	5% to 95% (non-condensing)
APPROVALS**	
CELLULAR	Visit digi.com/resources/certifications for latest certifications and updates
SAFETY / SECURITY	IEC62368-1, CB, EN62311, FIPS 140-2
EMISSIONS / IMMUNITY	CE; RED; FCC Part 15 Subpart B; CAN ICES-003
WARRANTY***	
PRODUCT WARRANTY	1-year

* Includes the Digi 360 solution for Digi EX50 (1-year) with Digi Remote Manager, warranty and customer care.

**Visit digi.com/resources/certifications for latest approvals and updates.

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

Featured Technologies



*FirstNet® and the FirstNet logo are registered trademarks and service marks of the First Responder Network Authority. All other trademarks are the property of their respective owners.

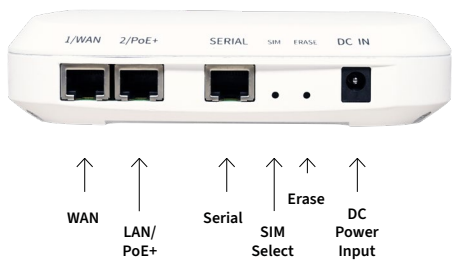
DIGI EX50 5G WITH DIGI 360

Product Photos

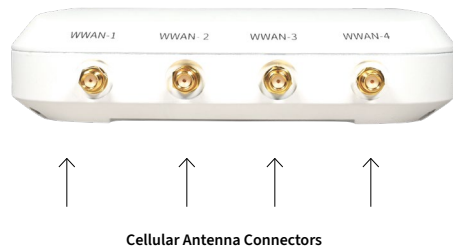
Digi EX50 5G Photos



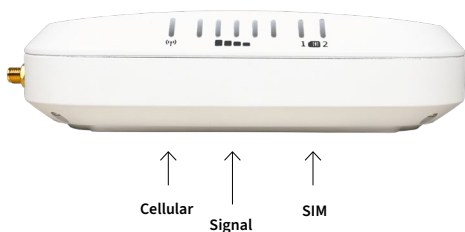
Digi EX50 5G— front



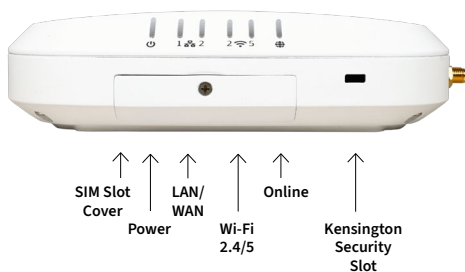
Digi EX50 5G— back



Digi EX50 5G — left



Digi EX50 5G — right



DIGI EX50 5G WITH DIGI 360

Part Numbers

Part Numbers	Digi EX50 5G with Digi 360*
EX50-WXS6-GLB	Digi EX50 — Global, 5G NR Sub-6 GHz with 4G/3G fallback, Wi-Fi 6 2x2 MIMO DBS, dual 2.5 GbE, RS-232, FirstNet Capable™, with accessories**

*Includes **Digi 360** solution for **Digi EX50** (1-year) with **Digi Remote Manager**, **warranty** and **customer care**.

**Accessories Included: DC power supply, mounting hardware, Ethernet and serial cables.

Part Numbers	Available Accessories***
76002154	Digi EX50 EU power cord
76002153	Digi EX50 UK power cord

***Sold separately, unless otherwise noted.

Part Numbers	Digi 360 Extensions and Renewals
DIGI360-EX50-EXT-2YR	Digi 360 extension for two additional years for Digi EX50
DIGI360-EX50-EXT-4YR	Digi 360 extension for four additional years for Digi EX50
DIGI360-EX50-REN-1YR	Digi 360 renewal for one additional year for Digi EX50
DIGI360-EX50-REN-3YR	Digi 360 renewal for three additional years for Digi EX50
DIGI360-EX50-REN-5YR	Digi 360 renewal for five additional years for Digi EX50

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.



For more information about Digi EX50 5G,
visit digi.com/ex50.

877-912-3444 | 952-912-3444

