



Digi TX54 5G

Rugged and secure cellular router for mission critical industrial and transportation applications, including 5G and primary responder models for public safety networks

The versatility of **Digi TX54** routers makes them ideal for mission critical applications requiring continuous connectivity, field longevity and edge computing. Digi TX54 provides secure routing and gateway functionality across wired and wireless communication networks. Local private subnets are bridged across public networks to safeguard privacy and integrity.

Digi TX54 is available with dual Wi-Fi radios to segment passenger Wi-Fi from fare collection, data, video and other applications, and with models for single and dual LTE-Advanced, LTE-Advanced Pro and 5G. Digi TX54 also offers models with **FirstNet Trusted™** and **Verizon Frontline** support for the critical demands of first responders and emergency communications. Digi TX54 also meets the U.S. government cybersecurity **FIPS 140-2** standard.

Digi TX54 includes concurrent and independent dual cellular interfaces that prioritize critical communications. The industrial-grade design supports the most rugged conditions, including vibration and temperature changes. Support for **Digi Containers** and Python allows for flexible edge computing and intelligence.

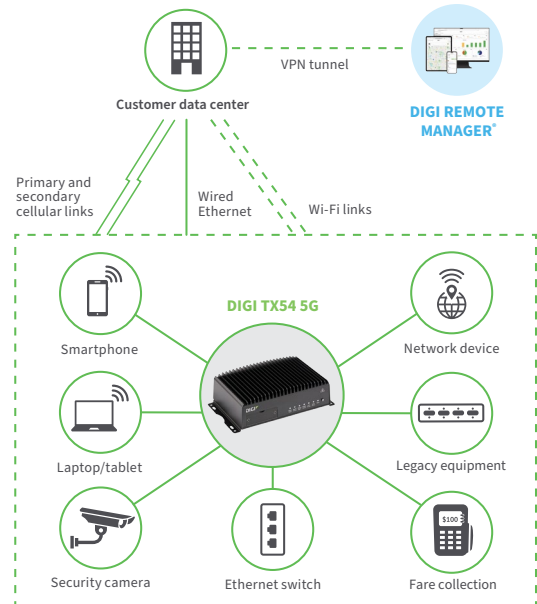
Four Gigabit Ethernet ports connect other IP-capable systems, each configurable as an isolated secure LAN, or all four can function as a Layer 2 switch. **Digi TrustFence®**, a suite of hardware and firmware features, ensures the integrity of Digi TX54 security functions, and chip-level encryption protects the onboard file system.

Digi Remote Manager® allows you to centrally configure, deploy and manage your network and connected devices. **Digi WAN Bonding** and **Digi Mobile VPN** value-added services provide constant, secure connectivity with 5G/LTE WAN aggregation, immediate failover and highly resilient application and session persistence with mobile encryption for critical communication.

Key features, benefits and applications

- 5G, LTE-A Pro and LTE-A single and dual cellular models
- Primary responder models for critical communications with **FirstNet Trusted™** and **Verizon Frontline** support
- Meets U.S. government **FIPS 140-2** cybersecurity standard
- Capable of segmenting private and public data communication across dual cellular modules
- High-speed Wi-Fi 5 (802.11ac) for WAN or LAN service and optional dual Wi-Fi radios
- Cryptographic co-processor with secure key generation
- Built-in **Digi TrustFence** for device security, secure encrypted connections, ongoing monitoring and support
- **Digi Remote Manager** platform to easy setup, mass configuration and management
- Value-added services include **Digi Containers**, **Digi WAN Bonding** 5G/LTE WAN aggregation with immediate failover and **Digi Mobile VPN** for secure, persistent mobile connectivity

APPLICATION EXAMPLE



Related Digi transportation router solutions



Digi TX64 5G Rail



Digi TX64 5G



Digi TX40 5G



Digi Remote Manager

DIGI TX54 5G

Management

Digi Accelerated Linux (DAL OS) and Digi Remote Manager (Digi RM)

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 www.digi.com/DAL.

Digi Remote Manager

Digi Remote Manager (Digi RM) 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 www.digi.com/digi-remote-manager.

Digi RM Infrastructure

- 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

Digi RM Security

- 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



DAL OS and Digi RM Capabilities

- **DAL OS with Digi Remote Manager:** Remote console access, Configuration Manager, 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 tools:** iPerf and nuttcp bandwidth testing, Find Me tool
- **GNSS:** NMEA/TAIP location forwarding to multiple servers, geofencing
- 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 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

Security and Value-Added Services

Digi TrustFence



BUILT-IN SECURITY. DELIVERED.

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 www.digi.com/trustfence.

Digi TrustFence is a device security framework that simplifies the process of securing multiple connected devices.

- **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:** TrustFence provides data authentication and device identity management options and ensures that products are not shipped with default user and password settings.
- **Secure connections:** These connections utilize the latest encryption protocols for data in motion and over-the-air (OTA) transmissions to ensure the integrity of network data.
- **Ongoing monitoring and support:** Digi provides ongoing threat measurement and monitoring services and performs external security audits.

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 Mobile VPN



SECURE VPN SERVICE WITH PERSISTENT CONNECTIVITY FOR CRITICAL COMMUNICATIONS

Digi Mobile VPN enables users to create a secure connection between their data centers and the Digi router, including connected (wired or wireless) edge devices. Digi Mobile VPN offers persistent, secure connectivity, utilizing **Digi Remote Manager** as the central portal for orchestrating the mobile VPN setup and deployment.

This functionality is particularly important for public sector, emergency response and mass transit applications that require secure and reliable connections in first responder vehicles, buses, trains and paratransit vans.

*Digi Containers, Digi WAN Bonding and Digi Mobile VPN are available as a subscription added to Digi Remote Manager Premier.



Manage and configure Digi TX54 5G with Digi Remote Manager

SPECIFICATIONS		DIGI TX54 5G
WIRELESS INTERFACES		
CELLULAR / WWAN		
5G MODELS	5G NR Sub-6 GHz bands: n1, n2, n3, n5, n7, n8, n12, n20, n28, n38, n41, n48 CBRS, n66, n71, n77, n78, n79, C-band 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, B46, B48 CBRS, B66, B71 3G UMTS/HSPA+ bands: B1, B2, B4, B5, B6, B8, B9, B19	
4G LTE-ADVANCED PRO MODELS (UNITED STATES / CANADA)	4G LTE-Advanced Pro bands: B1, B2, B3, B4, B5, B7, B8, B12, B13, B14 FirstNet®, B18, B19, B20, B26, B29, B30, B32, B41, B42, B43, B46, B48 CBRS, B66 3G UMTS/HSPA+ bands: B1, B2, B4, B5, B6, B8, B9, B19	
4G LTE-ADVANCED MODELS (GLOBAL)	4G LTE-Advanced bands: B1, B2, B3, B4, B5, B7, B8, B12, B13, B17, B20, B25, B26, B28, B29, B30, B32, B38, B40, B41, B66 3G UMTS/HSPA+ bands: B1, B2, B4, B5, B8	
CONNECTORS	4G single cellular models: (2) 50 Ω SMA (center pin: female) 4G dual cellular models: (4) 50 Ω SMA (center pin: female) 5G single cellular models: (4) 50 Ω SMA (center pin: female) 5G dual cellular models: (6) 50 Ω SMA (center pin: female)	
SIM SLOTS	Single cellular models: (2) Mini-SIM (2FF) Dual cellular models: (4) Mini-SIM (2FF)	
SIM SECURITY	SIM slot cover plate included	
WI-FI		
TECHNOLOGY	Wi-Fi 5 (802.11ac) 2.4 GHz and 5 GHz, 2 x 2 MIMO	
SECURITY	WPA, WPA2 and WPA3 Personal and Enterprise, Open and Open Enhanced security standards	
HOTSPOT	Captive portal with customizable splash page, terms and conditions, shared password, user-specific password, RADIUS authentication	
THIRD-PARTY SERVICES	Content filtering, embedded advertising	
MODES	Simultaneous client and access point support Single Wi-Fi models: up to 8 access points, up to 128 client connections Dual Wi-Fi models: up to 16 access points, up to 256 client connections	
CONNECTORS	Single Wi-Fi models: (2) 50 Ω RP-SMA (center pin: male) Dual Wi-Fi models: (4) 50 Ω RP-SMA (center pin: male)	
BLUETOOTH		
TECHNOLOGY	Bluetooth® 4.2	
GNSS		
TECHNOLOGY	GPS, Galileo, BeiDou and GLONASS with Untethered Dead Reckoning (UDR), multiple geofence support	
SENSITIVITY	Tracking and navigation: -163 dBm	
PROTOCOL	NMEA and TAIP	
CONNECTOR	(1) 50 Ω SMA (center pin: female); +3.3 VDC active antenna drive	
WIRED INTERFACES		
ETHERNET		
PORTS / CONNECTOR	(4) RJ-45; 10/100/1000 Mbps Base-T (auto-sensing); IEEE 802.3; configurable as WAN or LAN	
SERIAL		
PORTS / CONNECTOR	(1) RS-232; DB-9 male (DTE)	
USB		
PORTS / CONNECTOR	(3) USB 3.0 Type A	

DIGI TX54 5G

Specifications and Warranty



Manage and configure Digi TX54 5G with Digi Remote Manager

SPECIFICATIONS		DIGI TX54 5G
SOFTWARE AND MANAGEMENT		
REMOTE MANAGEMENT		Digi Remote Manager (cloud based); SNMP v2c/v3 (user installed/managed), SMS
LOCAL MANAGEMENT		Web UI (HTTPS); CLI (SSH, serial)
MANAGEMENT TOOLS		SFTP, SCP; protocol analyzer with PCAP for Wireshark; event logging with Syslog
MEMORY		
RAM / FLASH		256 MB / 512 MB
PHYSICAL		
DIMENSIONS		146 mm x 210 mm x 63.5 mm (5.75 in x 8.25 in x 2.5 in)
WEIGHT		1.5 kg (3.3 lbs)
STATUS LEDS		Power, WWAN signal and service (per module), Wi-Fi service (per module), GNSS, Ethernet (link, activity)
ENCLOSURE / RATING		Aluminum / IP54
POWER REQUIREMENTS		
POWER INPUT		9 – 36 VDC, ignition sense
POWER CONNECTOR		Screw down removable terminal block
POWER CONSUMPTION		13 W typical (idle); 20 W (peak RF Tx/Rx)
ENVIRONMENTAL		
MOUNTING OPTIONS		Flexible mounting options
OPERATING TEMPERATURE		–34 °C to 74 °C (–29 °F to 165 °F)
STORAGE TEMPERATURE		–40 °C to 85 °C (–40 °F to 185 °F)
RELATIVE HUMIDITY		0% to 95% (non-condensing)
NEMA		Meets the NEMA TS2 environmental requirements
APPROVALS		
CELLULAR		PTCRB, AT&T, FirstNet Trusted™, T-Mobile, Verizon, Verizon Frontline; Visit www.digi.com/resources/certifications for latest cellular certifications
SAFETY		EN 60950, EN 62368, CB scheme
VEHICLE		ISO 7637-2/3, ISO 10605, ISO 16750-2 Pulses 4/5a/5b, SAE J1113, E-Mark (UNECE Reg. 10)
EMISSIONS / IMMUNITY		CE, FCC Part 15 Class B, AS/NZS CISPR 22, EN 55024, EN 55032
ENVIRONMENTAL		MIL-STD-810G (temperature, humidity, vibration, shock, dust)
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.

DIGI TX54 5G

Photos, Partners and Technologies

Digi TX54 Product Photos

DIGI TX54 DUAL WI-FI — FRONT



DIGI TX54 DUAL WI-FI — BACK



DIGI TX54 — FRONT



DIGI TX54 — BACK



DIGI TX54 DUAL CELLULAR — FRONT



DIGI TX54 DUAL CELLULAR — BACK



Featured Partners and Technologies



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

DIGI TX54 5G

Part Numbers

PART NUMBERS	DIGI TX54
TX54-A152	Digi TX54 5G — single 5G, dual Wi-Fi, global
TX54-A156	Digi TX54 5G — single 5G, Wi-Fi, global
TX54-A256	Digi TX54 5G — dual 5G, Wi-Fi, global
TX54-A146	Digi TX54 Primary Responder — single LTE-Advanced Pro Cat 12, Wi-Fi, North America
TX54-A246	Digi TX54 Primary Responder — dual LTE-Advanced Pro Cat 12, Wi-Fi, North America
TX54-A106	Digi TX54 — single LTE-Advanced Cat 11, Wi-Fi, global
TX54-A112	Digi TX54 — single LTE-Advanced Cat 11, dual Wi-Fi, global
TX54-A206	Digi TX54 — dual LTE-Advanced Cat 11, Wi-Fi, global

PART NUMBERS	AVAILABLE ACCESSORIES*
76002145	Digi TX54 5G accessory kit — dual Wi-Fi
76002143	Digi TX54 5G accessory kit — single cellular
76002144	Digi TX54 5G accessory kit — dual cellular
76002086	Digi TX54 4G accessory kit — dual Wi-Fi
76002084	Digi TX54 4G accessory kit — single cellular
76002085	Digi TX54 4G accessory kit — dual cellular
76002091	Digi TX54 DIN rail bracket
76002121	Digi TX power supply — extended temperature range

*Sold separately, unless otherwise noted.

PART NUMBERS	DIGI REMOTE MANAGER AND VALUE-ADDED SERVICES
DIGI REMOTE MANAGER SUBSCRIPTIONS	
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
VALUE-ADDED SERVICES SUBSCRIPTIONS	
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
DIGI-SRV-MVPN-TIER1-INSTALL	Digi Mobile VPN installation, less than 500 routers (one-time fee, installation for subscriptions up to 500 routers)
DIGI-SRV-MVPN-PR-TIER1-1YR	Digi Mobile VPN subscription (Primary Responder), less than 500 routers — 1-year subscription
DIGI-SRV-MVPN-TIER1-1YR	Digi Mobile VPN subscription, less than 500 routers — 1-year subscription



For more information about Digi TX54 5G,
visit www.digi.com/tx54-5g.

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