



Manage this device with Digi Remote Manager

# DIGI TX54

## 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.

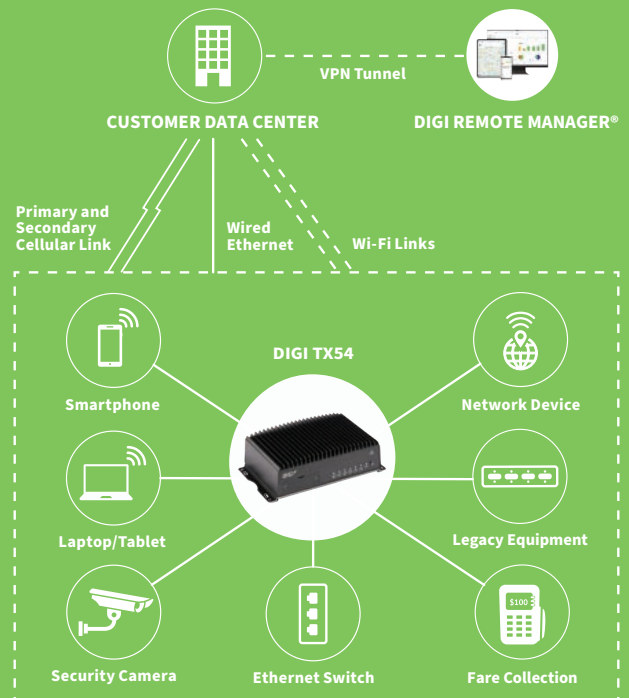
Digi TX54 includes concurrent and independent dual cellular interfaces that prioritize critical communications. The industrial-grade design supports the most rugged conditions, including vibration and temperature changes. Support for Digi Containers and Python allows for flexible edge computing and intelligence.

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.

### FEATURES AND BENEFITS

- 5G, LTE-A Pro and LTE-A single and dual cellular models
- Primary responder models for critical communications
- 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 for easy setup, mass configuration and management
- Digi WAN Bonding for 5G/LTE WAN aggregation and immediate failover

### APPLICATION EXAMPLE



### RELATED PRODUCTS



Digi TX40



Digi TX64



Digi TX64 Rail



Accessories



Digi Remote Manager

# HARDWARE-ENABLED, SOFTWARE-DEFINED



## 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](http://www.digi.com/DAL).

## 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

- **DAL OS with Digi Remote Manager:** Remote console access, Configuration Manager, HTTP proxy, device event logs, configurable maintenance window
- **Serial:** Digi RealPort®, 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, geo-fencing
- 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

## DIGI RM 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

## DIGI RM 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



## DIGI TRUSTFENCE

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

### BUILT-IN SECURITY. DELIVERED.

Designed for mission-critical applications, Digi TrustFence enables you to easily integrate device security, device identity, and data privacy capabilities into your product design. Digi TrustFence designs security into IoT devices that can grow and adapt with new and evolving threats.

Learn more at [www.digi.com/trustfence](http://www.digi.com/trustfence).

## 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 local intrusion.

## AUTHENTICATION

- Digi TrustFence provides data authentication and device identity management options. Furthermore, TrustFence ensures that products are not shipped with default user and password settings.

## SECURE CONNECTIONS

- Digi TrustFence utilizes the latest encryption protocols for data in motion and over-the-air (OTA) transmissions to ensure the integrity of data flowing across a network.

## ONGOING MONITORING AND SUPPORT

- Digi provides ongoing threat measurement and monitoring services, performs external security audits and proactively communicates with customers regarding upcoming threats.

# PRODUCT IMAGES

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



## SPECIFICATIONS

## DIGI TX54

## WIRELESS INTERFACES

## CELLULAR / WWAN

<b>5G MODELS</b>	5G NR Sub-6 GHz bands: n1, n2, n3, n5, n7, n8, n12, n20, n28, n38, n41, 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
<b>4G LTE-ADVANCED PRO MODELS (UNITED STATES / CANADA)</b>	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, B66 3G UMTS/HSPA+ bands: B1, B2, B4, B5, B6, B8, B9, B19
<b>4G LTE-ADVANCED MODELS (GLOBAL)</b>	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
<b>CONNECTOR</b>	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)
<b>SIM SLOTS</b>	Single cellular models: (2) Mini-SIM (2FF) Dual cellular models: (4) Mini-SIM (2FF)
<b>SIM SECURITY</b>	SIM slot cover plate included

## WI-FI

<b>TECHNOLOGY</b>	Wi-Fi 5 (802.11ac) 2.4 GHz and 5 GHz, 2x2 MIMO
<b>SECURITY</b>	WPA, WPA2 and WPA3 Personal and Enterprise, Open and Open Enhanced security standards
<b>HOTSPOT</b>	Captive portal with customizable splash page, terms and conditions, shared password, user-specific password, RADIUS authentication
<b>THIRD-PARTY SERVICES</b>	Content filtering, embedded advertising
<b>MODES</b>	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
<b>CONNECTORS</b>	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®

<b>TECHNOLOGY</b>	Bluetooth 4.2
<b>GNSS</b>	
<b>TECHNOLOGY</b>	GPS, Galileo, BeiDou and GLONASS with Untethered Dead Reckoning (UDR), multiple geofence support
<b>SENSITIVITY</b>	Tracking and navigation: -163 dB
<b>PROTOCOL</b>	NMEA and TAIP
<b>CONNECTOR</b>	(1) 50 Ω SMA (center pin: female); +3.3 VDC active antenna drive

## WIRED INTERFACES

## ETHERNET

<b>PORTS / CONNECTORS</b>	(4) RJ-45 10/100/1000 Mbps Base-T (auto-sensing); IEEE 802.3; configurable as WAN or LAN
---------------------------	---

## SERIAL

<b>PORTS / CONNECTORS</b>	(1) RS-232; DB-9 male (DTE)
---------------------------	-----------------------------

## USB

<b>PORTS / CONNECTORS</b>	(1) USB 3.0 Type A connector
---------------------------	------------------------------

## SOFTWARE AND MANAGEMENT

<b>REMOTE MANAGEMENT</b>	Digi Remote Manager (cloud based); SNMP v2c/v3 (user installed/managed), SMS
<b>LOCAL MANAGEMENT</b>	Web UI (HTTPS), CLI (SSH, serial)
<b>MANAGEMENT TOOLS</b>	SFTP, SCP; protocol analyzer with PCAP for Wireshark; event logging with Syslog

## MEMORY

<b>RAM / FLASH</b>	256 MB / 512 MB
--------------------	-----------------

## PHYSICAL

<b>DIMENSIONS (L X W X H)</b>	146 x 210 x 63.5 mm (5.75 x 8.25 x 2.5 in)
<b>WEIGHT</b>	1.5 kg (3.3 lbs)
<b>STATUS LEDS</b>	Power, WWAN signal and service (per module), Wi-Fi service (per module), GNSS, Ethernet (link, activity)
<b>ENCLOSURE</b>	Aluminium, IP54

## SPECIFICATIONS

## DIGI TX54

### POWER REQUIREMENTS

<b>POWER INPUT</b>	9 to 36 VDC, ignition sense
<b>POWER CONNECTOR</b>	Screw down removable terminal block
<b>POWER CONSUMPTION</b>	13 W typical (idle); 20 W typical (peak Tx/Rx)

### ENVIRONMENTAL

<b>MOUNTING OPTIONS</b>	Flexible mounting options
<b>OPERATING TEMPERATURE</b>	-34 °C to 74 °C (-29 °F to 165 °F)
<b>STORAGE TEMPERATURE</b>	-40 °C to 85 °C (-40 °F to 185 °F)
<b>RELATIVE HUMIDITY</b>	5% to 95% (non-condensing)

### NEMA

<b>SPECIFICATION</b>	Meets the NEMA TS2 environmental requirements
----------------------	---

### APPROVALS\*

<b>CELLULAR</b>	PTCRB, AT&T, FirstNet Trusted™, T-Mobile, Verizon, Verizon Frontline
<b>SAFETY</b>	EN 60950, EN 62368, CB scheme
<b>VEHICLE</b>	ISO 7637-2/3, ISO 10605, ISO 16750-2 Pulses 4/5a/5b, SAE J1113, E-Mark (UNECE Reg. 10)
<b>EMISSIONS/IMMUNITY</b>	CE, FCC Part 15 Class B, AS/NZS CISPR 22, EN 55024, EN 55032
<b>ENVIRONMENTAL</b>	MIL-STD-810G (temperature, humidity, vibration, shock, dust)

### WARRANTY\*\*

<b>PRODUCT WARRANTY</b>	3-year
-------------------------	--------

\*Visit [www.digi.com/resources/certifications](http://www.digi.com/resources/certifications) for latest certifications

\*\*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

<b>DIGI-SRV-WB-TIER1-1YR</b>	Digi WAN Bonding subscription with 100 Mbps max throughput
<b>DIGI-SRV-WB-TIER2-1YR</b>	Digi WAN Bonding subscription with 200 Mbps max throughput
<b>DIGI-SRV-WB-TIER3-1YR</b>	Digi WAN Bonding subscription with 1 Gbps max throughput

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

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	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®
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



www.stepglobal.com  
 +61 3 9551 7334  
 sales@stepglobal.com

1 Arco Lane  
 Heatherton, Vic  
 3202 Australia

