



Manage this device with Digi Remote Manager



# DIGI TX54

## Rugged and secure cellular router for mission critical industrial and transportation applications, including FirstNet Ready™ models for public safety networks

The versatility and performance of **Digi TX54** routers make them ideal for mission critical applications requiring continuous connectivity, field longevity and edge computing. FirstNet Ready™ 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 offers models with both single and dual LTE-Advanced or LTE-Advanced Pro FirstNet Ready™ cellular modules. FirstNet® is a public/private partnership managed by the U.S. Department of Commerce that develops and operates

a nationwide first responder network.

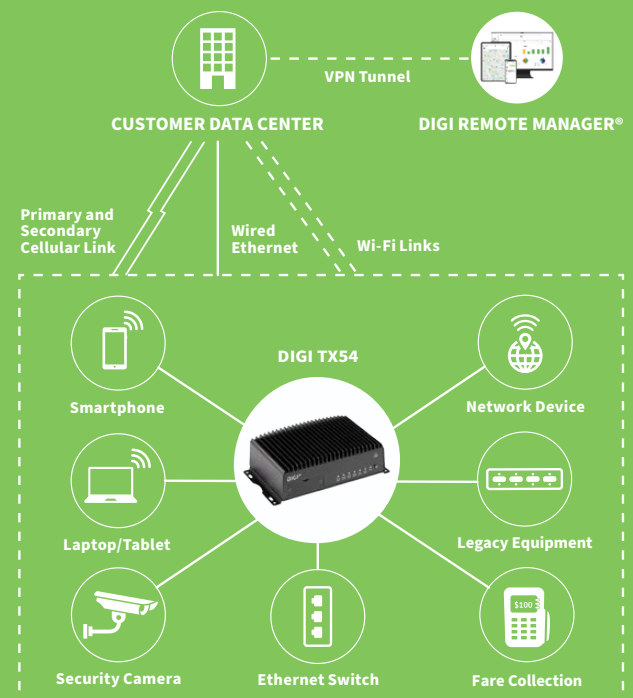
Designed to meet the demands of first responders, Digi TX54 includes concurrent and independent dual cellular interfaces that prioritize critical communications. The industrial-grade design supports the most rugged conditions, including vibration and temperature changes. A Python development environment allows for 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. Chip-level encryption protects the onboard file system.

### FEATURES AND BENEFITS

- FirstNet Ready™ and global models are available in both single and dual cellular options
- Future-built with dual-core 880 MHz MIPS processor and PCIe 2.0 internal bus
- Capable of segmenting private and public data communication across dual 600 Mbps LTE-Advanced Cat 11 or LTE-Advanced Pro Cat 12 cellular modules
- High-speed 867 Mbps 802.11ac Wi-Fi for WAN or LAN service and optional dual Wi-Fi radios
- Cryptographic co-processor with secure key generation
- **Digi Remote Manager®** platform for easy setup, mass configuration and management

### APPLICATION EXAMPLE



### RELATED PRODUCTS



## SPECIFICATIONS

## DIGI TX54

<b>CELLULAR*</b>	
<b>CERTIFICATIONS</b>	Visit <a href="http://www.digi.com/resources/certifications">www.digi.com/resources/certifications</a> for latest cellular certifications
<b>LTE-ADVANCED WORLDWIDE</b>	LTE FDD: B1 (2100), B2 (1900), B3 (1800), B4 (1700AWS), B5 (850), B7 (2600), B8 (900), B12 (700ac), B13 (700c), B17 (700), B20 (800DD), B25 (1900), B26 (850), B28 (700 APAC), B29 (700), B30 (2300), B66 (1700AWS); LTE TDD: B38 (2600), B40 (2300), B41 (2500); 3G: B1 (2100), B2 (1900), B4 (1700AWS), B5 (850), B8 (900); Transfer rate (max): 600 Mbps down, 75 Mbps up per module (Cat 11)
<b>LTE-ADVANCED PRO UNITED STATES / CANADA (FIRSTNET READY™)</b>	LTE FDD: B1 (2100), B2 (1900), B3 (1800), B4 (1700AWS), B5 (850), B7 (2600), B8 (900), B9 (1800), B12 (700ac), B13 (700c), B14 (700PS) - FirstNet®, B18 (850), B19 (800), B20 (800DD), B26 (US 850 Ext), B29 (US 700de Lower), B30 (2300), B32 (1500), B48 (3600), B66 (AWS-3); LTE TDD: B41 (2500), B42 (3500), B43 (3600), B46 (5200); 3G HSPA+: B1 (2100), B2 (1900), B4 (1700AWS), B5 (850), B6 (800), B8 (900), B9 (1700), B19 (800); Transfer rate (max): 600 Mbps down, 150 Mbps up (Cat 12)
<b>CONNECTOR</b>	Single cellular models: 2 x 50 Ω SMA (center pin: female); Dual cellular models: 4 x 50 Ω SMA (center pin: female)
<b>SIM SLOTS</b>	Single cellular models: 2 x Mini-SIM (2FF); Dual cellular models: 4 x Mini-SIM (2FF)
<b>SIM SECURITY</b>	Screw-down SIM cover
<b>WI-FI</b>	
<b>MODULE</b>	2x2 MIMO 2.4/5 GHz 802.11 a/b/g/n/ac, 867 Mbps (max); Dual Wi-Fi model (TX54-A112): dual 2x2 MIMO 2.4/5 GHz 802.11 a/b/g/n/ac, 867 Mbps (max)
<b>HOTSPOT AUTHENTICATIONS</b>	Click-through, Local Shared Password, RADIUS Shared Password, RADIUS Users, Hotspot System, Embedded Advertising
<b>WI-FI AUTHENTICATIONS</b>	Open, WPA-personal, WPA2-personal, WPA2-enterprise
<b>THIRD-PARTY SERVICES</b>	Content filtering
<b>MODES</b>	Single Wi-Fi models: up to 8 Access Points, 128 Client connections Dual Wi-Fi model (TX54-A112): up to 16 Access Points, 256 Client connections
<b>SECURITY</b>	WPA/WPA2-Personal, WPA/WPA2-Enterprise
<b>CONNECTORS</b>	2 x 50 Ω RP-SMA (center pin: male)
<b>BLUETOOTH®</b>	
<b>MODULE</b>	BLE 4.2
<b>GPS</b>	
<b>TECHNOLOGY</b>	Multi-constellation: concurrent reception of up to 3 GNSS systems (GPS/Galileo with either GLONASS or BeiDou)
<b>SENSITIVITY</b>	-163 dB
<b>PROTOCOL</b>	Protocol NMEA 0183 V 4.0 sentence output
<b>CONNECTOR</b>	1 x 50 Ω SMA (center pin: female); +3.3 VDC active antenna drive
<b>ETHERNET</b>	
<b>PORTS</b>	4 x RJ-45; 10/100/1000 Mbps (auto-sensing)
<b>SERIAL</b>	
<b>PORTS</b>	1 x DB9-M; RS-232 DTE; Signal support TXD, RXD, RTS, CTS, DTR, DCD, DSR, RI, software (XON/XOFF) and hardware flow control supported
<b>USB</b>	
<b>PORTS</b>	1 x USB 3.0 Type A connector
<b>PHYSICAL</b>	
<b>DIMENSIONS (L X W X H)</b>	14.61 cm x 20.95 cm x 6.35 cm (5.75 in x 8.25 in x 2.5 in)
<b>WEIGHT</b>	1.5 kg (3.3 lbs)
<b>STATUS LEDS</b>	Power, WWAN (signal, service) per module, Wi-Fi service (per module), GNSS service, Ethernet (link, activity)
<b>ENCLOSURE</b>	Die-cast aluminium / IP54
<b>POWER REQUIREMENTS</b>	
<b>POWER INPUT</b>	9 - 36 VDC, 30 W minimum power source required
<b>POWER CONSUMPTION</b>	13 W typical (idle); 20 W typical (peak Tx/Rx)
<b>ENVIRONMENTAL</b>	
<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)
<b>NEMA</b>	
<b>SPECIFICATION</b>	Meets or exceeds the NEMA TS2 environmental requirements (-34° C to 74° C temperature range; 18% to 95% humidity over the temperature range; Vibration: 0.5 g @ 5 Hz to 30 Hz; Shock: 10 g)

\*Transfer rates are network operator dependent.



# 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

## 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 TX54
TX54-A106	Digi TX54 - single LTE-Advanced Cat 11, Wi-Fi, worldwide, Anatel
TX54-A112	Digi TX54 - single LTE-Advanced Cat 11, dual Wi-Fi, worldwide
TX54-A206	Digi TX54 - dual LTE-Advanced Cat 11, Wi-Fi, worldwide, Anatel

PART NUMBERS*	DIGI TX54 FIRSTNET®
TX54-A146	Digi TX54 FirstNet - single LTE-Advanced Pro Cat 12, Wi-Fi, North America, CBRS, Sprint
TX54-A246	Digi TX54 FirstNet - dual LTE-Advanced Pro Cat 12, Wi-Fi, North America, CBRS, Sprint

PART NUMBERS**	ANTENNAS
76002090	GNSS Untethered Dead Reckoning - Roof Mount Antenna
76002089	GNSS Untethered Dead Reckoning - Dash Mount Antenna
76002097	7-in-1 Dome Antenna, LTE, Wi-Fi, GNSS, Gray
76002100	7-in-1 Dome Antenna, LTE, Wi-Fi, GNSS, Green, 3 ft
76002101	5-in-1 Dome Antenna, LTE, Wi-Fi, GNSS, Black, 6 ft
76002102	3-in-1 Dome Antenna, LTE, GNSS, Black, 6 ft

PART NUMBERS**	POWER SUPPLY
76002099	Dual Output Power Supply TX54
76002096	Single Output Power Supply DOT Kit TX54
76002098	Single Output Power Supply Kit WR31

PART NUMBERS**	OTHER ACCESSORIES
76002084	Digi TX54/WR54 Accessory Kit - single cellular
76002085	Digi TX54/WR54 Accessory Kit - dual cellular
76002086	Digi TX54/WR54 Accessory Kit - dual Wi-Fi
76002076	Kit, Digi WR54/WR64 power supply
76002091	TX54 DIN Rail Bracket
26000261	CBL, Galaxy PMBus Active Adapter

\*Digi TX54 FirstNet® models are only available through AT&T. FirstNet® and FirstNet Ready™ are registered trademarks and service marks of the First Responder Network Authority.

\*\*Sold separately, unless otherwise noted.

**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 [www.digi.com/support](http://www.digi.com/support).

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