DIGI

Manage this device with Digi Remote Manager

FIRSTNET®
Built with AT&T
READY

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.
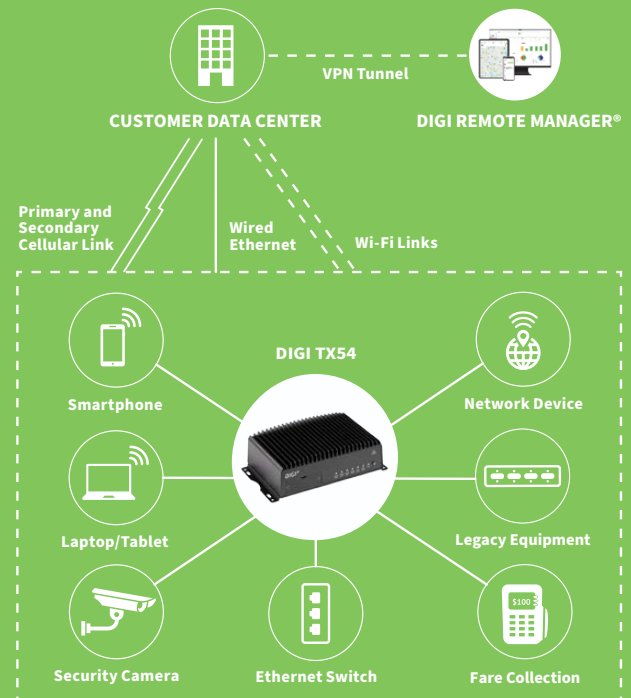
FEATURES AND BENEFITS

– 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

CUSTOMER DATA CENTER

VPN Tunnel

DIGI REMOTE MANAGER®

Primary and Secondary Cellular Link

Wired Ethernet

Wi-Fi Links

DIGI TX54

Smartphone

Network Device

Laptop/Tablet

Legacy Equipment

Security Camera

Ethernet Switch

Fare Collection

RELATED PRODUCTS

Digi TX64

Digi WR44 RR

Digi WR31

Accessories

Digi Remote Manager®

SPECIFICATIONS	DIGI TX54
CELLULAR*	
CERTIFICATIONS	Visit www.digi.com/resources/certifications for latest cellular certifications
LTE-ADVANCED WORLDWIDE	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)
LTE-ADVANCED PRO UNITED STATES / CANADA (FIRSTNET READY™)	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)
CONNECTOR	Single cellular models: 2 x 50 Ω SMA (center pin: female); Dual cellular models: 4 x 50 Ω SMA (center pin: female)
SIM SLOTS	Single cellular models: 2 x Mini-SIM (2FF); Dual cellular models: 4 x Mini-SIM (2FF)
SIM SECURITY	Screw-down SIM cover
WI-FI	
MODULE	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)
HOTSPOT AUTHENTICATIONS	Click-through, Local Shared Password, RADIUS Shared Password, RADIUS Users, Hotspot System, Embedded Advertising
WI-FI AUTHENTICATIONS	Open, WPA-personal, WPA2-personal, WPA2-enterprise
THIRD-PARTY SERVICES	Content filtering
MODES	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
SECURITY	WPA/WPA2-Personal, WPA/WPA2-Enterprise
CONNECTORS	2 x 50 Ω RP-SMA (center pin: male)
BLUETOOTH®	
MODULE	BLE 4.2
GPS	
TECHNOLOGY	Multi-constellation: concurrent reception of up to 3 GNSS systems (GPS/Galileo with either GLONASS or BeiDou)
SENSITIVITY	-163 dB
PROTOCOL	Protocol NMEA 0183 V 4.0 sentence output
CONNECTOR	1 x 50 Ω SMA (center pin: female); +3.3 VDC active antenna drive
ETHERNET	
PORTS	4 x RJ-45; 10/100/1000 Mbps (auto-sensing)
SERIAL	
PORTS	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
USB	
PORTS	1 x USB 3.0 Type A connector
PHYSICAL	
DIMENSIONS (L X W X H)	14.61 cm x 20.95 cm x 6.35 cm (5.75 in x 8.25 in x 2.5 in)
WEIGHT	1.5 kg (3.3 lbs)
STATUS LEDS	Power, WWAN (signal, service) per module, Wi-Fi service (per module), GNSS service, Ethernet (link, activty)
ENCLOSURE	Die-cast aluminium / IP54
POWER REQUIREMENTS	
POWER INPUT	9 - 36 VDC, 30 W minimum power source required
POWER CONSUMPTION	13 W typical (idle); 20 W typical (peak 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	5% to 95% (non-condensing)
NEMA	
SPECIFICATION	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®

SPECIFICATIONS	DIGI TX54

APPROVALS	
CELLULAR	PTCRB, AT&T, FirstNet Ready™, OnGo, Sprint, Verizon, PNTM, Anatel; see part numbers for more details on each SKU; Visit www.digi.com/resources/certifications for latest cellular certifications
SAFETY	EN60950, EN62368
VEHICLE	ISO 7637-2/3, ISO 10605, ISO 16750-2 Pulses 4/5a/5b, SAE J1113, E-Mark
RAIL	EN45545-2, EN50121-3-2, EN50155 (TX54-A106, TX54-A146 and TX54-A246 only)
ENVIRONMENTAL	MIL-STD-810G (temperature, humidity, vibration, shock, dust)
EMISSIONS/IMMUNITY	CE, FCC Part 15 Class B, AS/NZS CISPR 22, EN55024, EN55032
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.

ENTERPRISE SOFTWARE	DESCRIPTION
PROTOCOL SUPPORT	HTTP, HTTPS, FTP client, TLS v1.2, SMTP client for use by scripts and the command line, SNMP (v3), SSH; remote management via Digi Remote Manager®; serial Modbus, MQTT client, protocol analyzer, DynDNS; dynamic DNS client compatible with BIND9/No-IP/DynDNS; DMNR; Dual-APN; X.509 certificate management; VRRP+
SECURITY	IP filtering, stateful firewall, custom firewall rules (iptables), address and port translation; User Authentication: 2-factor 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: groups 1-32
ROUTING/FAILOVER	IP pass-through; NAT, NAPT with IP port forwarding; Ethernet bridging; Ethernet bonding; 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; Nagios, DNS server, NTP server, mDNS, IPerf
LOCAL MANAGEMENT	Web interface (HTTP/HTTS); CLI (SSH, serial port); SNMP v3 read-only; custom factory configuration
MANAGEMENT / TROUBLESHOOTING PROTOCOLS	Protocol analyzer with PCAP for Wireshark, event and system logging (with syslog), accessible from Digi Remote Manager, SFTP or SCP, Intelliflow
PROGRAMMING TOOLS / ENVIRONMENTS	Python v3 (regularly updated to newest version)

PRODUCT IMAGES

FRONT
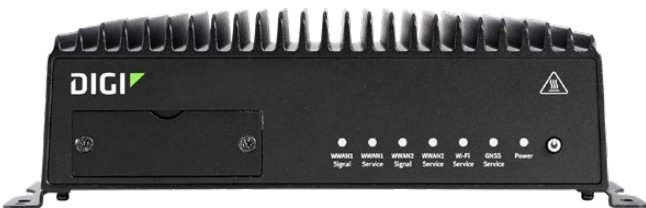
BACK

POWER SUPPLY**

ACCESSORY KIT**

**Sold separately, unless otherwise noted.

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

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

DIGI

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**.

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