



DUAL CELLULAR / DUAL WI-FI  
MOBILE ACCESS ROUTER



Manage this device with  
Digi Remote Manager

# DIGI TX54

Rugged and secure cellular router for mission critical industrial and transportation applications, including 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. 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 cellular modules.

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

- 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
- Securely deploy, monitor and control devices with Digi Remote Manager®

## RELATED PRODUCTS



Digi TX64



Digi WR44 RR



Digi WR31

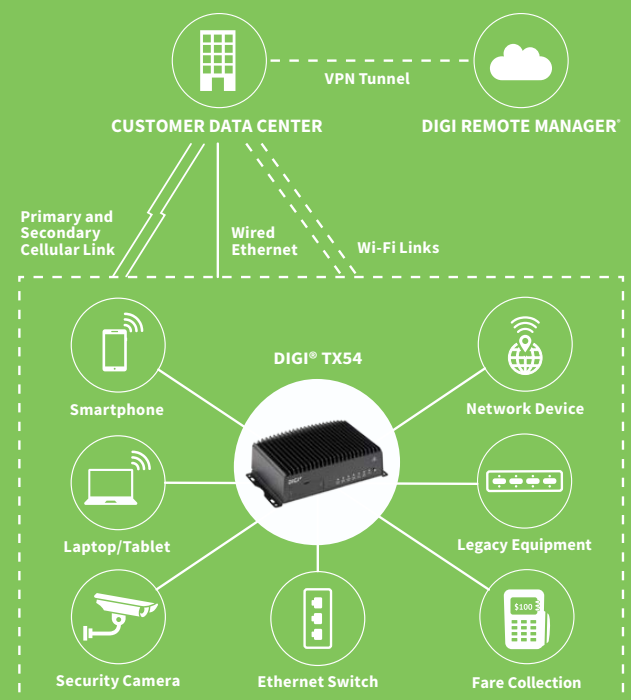


Accessories



Digi Remote Manager®

## APPLICATION EXAMPLE



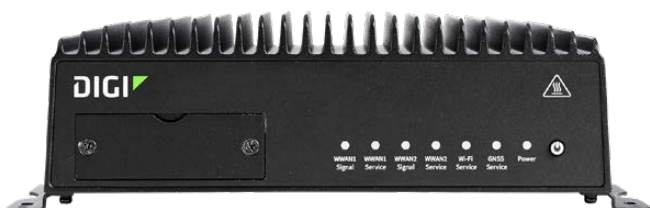
SPECIFICATIONS		DIGI TX54	
CELLULAR			
LTE-ADVANCED WORLDWIDE		LTE FDD: B1 (2100), B2 (1900), B3 (1800), B4 (1700AWS), B5 (850), B7 2600), B8 (900), B12 (700ac), B13 (700c), B17 (700), B20 (800DD), B25 (1900), B26 (850), B28 (700 APAC), B29 (700), B30 (2300 Rx only), B66 (1700AWS); LTE TDD: B38 (2600), B40 (2300), B41 (2500); 3G HSPA+: B1 (2100), B2 (1900), B4 (1700AWS), B5 (850), B8 (900); Transfer rate (max): 600 Mbps down, 75 Mbps up (Cat 11)	
LTE-ADVANCED PRO UNITED STATES / CANADA		LTE FDD: B1 (2100), B2 (1900), B3 (1800), B4 (1700AWS), B5 (850), B7 (2600), B8 (900), B9 (1800), B12 (700ac), B13 (700c), B14 (700PS), 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) 50 Ω SMA (center pin: female) Dual cellular models: (4) 50 Ω SMA (center pin: female)	
SIM SLOTS		Single cellular models: (2) Mini-SIM (2FF) Dual cellular models: (4) Mini-SIM (2FF)	
SIM SECURITY		Screw-down SIM cover	
WI-FI			
MODULE		2 x 2 MIMO 2.4/5 GHz 802.11 a/b/g/n/ac, 867 Mbps (max); dual Wi-Fi modules in TX54-A112	
HOTSPOT		Captive portal, customizable splash page	
AUTHENTICATION		Basic ToS acceptance, enterprise RADIUS	
THIRD-PARTY SERVICES		Content filtering, embedded advertising	
MODES		Up to 4 access points and 1 client per Wi-Fi module (8+2 total)	
SECURITY		WPA/WPA2-personal, WPA/WPA2-enterprise	
CONNECTORS		2 x 50 Ω RP-SMA (center pin: male)	
GPS			
TECHNOLOGY		Multi-constellation: concurrent reception of up to 3 GNSS (GPS, Galileo, GLONASS, BeiDou)	
SENSITIVITY		-163 dB	
PROTOCOL		Protocol NMEA 0183 V2.3 sentence output	
CONNECTOR		1 x 50 Ω SMA (center pin: female); +3.3 VDC active antenna drive	
ETHERNET			
PORTS		(4) RJ-45; 10/100/1000 Mbps (auto-sensing)	
SERIAL			
PORTS		(1) DB9-M; RS-232 DTE ; Signal support TXD, RXD, RTS, CTS, DTR, DCD, DSR, RI software (XON/XOFF), hardware supported	
USB			
PORTS		(1) 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 on, WWAN signal strength, WWAN service	
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)	
APPROVALS			
CELLULAR		PTCRB, AT&T, OnGo, Sprint, Verizon, Anatel; see part numbers for more details on certifications on each SKU	
SAFETY		EN60950, EN62368	
VEHICLE		ISO 7637-2/3, ISO 10605, ISO 16750-2 Pulses 4/5a/5b, SAE J1113, E-Mark	
RAIL		EN50155, EN45545-2, EN50121-3-2	
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	

\*Transfer rates are network operator dependent

ENTERPRISE SOFTWARE	DESCRIPTION
PROTOCOL SUPPORT	HTTP, HTTPS, FTP client, SSL, TLS v1.2, SCP (client and server), SFTP, SMTP client for use by scripts and the command line, SNMP (v2/v3), SSH; remote management via Digi Remote Manager®; Protocol analyzer, ability to capture PCAP for use with Wireshark; DynDNS; Dynamic DNS client compatible with BIND9/No-IP/DynDNS; Captive portal, Intelliflow; X.509 certificate management; Dead Reckoning
SECURITY	IP filtering, stateful firewall, custom firewall rules (iptables), address and port translation; SSL, SSLv2, SSLv3; 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: DH groups 1-32 (CURVE448)
ROUTING/FAILOVER	IP pass-through; NAT, NAPT with IP port forwarding; Ethernet bridging; 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, Multicast, mDNS, IPerf
LOCAL MANAGEMENT	Web interface (HTTP/HTTPS); CLI (SSH, serial port)
MANAGEMENT / TROUBLESHOOTING PROTOCOLS	Protocol analyzer with PCAP for Wireshark, event and system logging (with Syslog), accessible from Digi Remote Manager, SFTP or SCP
PROGRAMMING TOOLS / ENVIRONMENTS	Python v3.6.4

## PRODUCT IMAGES

FRONT



BACK



POWER SUPPLY\*



ACCESSORY KIT\*





## CAPABILITIES

- Centralized management of remote devices over 3G/4G/LTE
- Define standard configurations and automatically monitor individual devices for PCI security compliance
- Get alerts and create reports on performance statistics, including connection history, signal quality, latency, data usage and packet loss
- No servers or applications to operate and maintain
- Complete tasks for your entire device network in minutes
- Edit configurations and update firmware for individual devices or groups
- Monitor the status and location of remote devices via a web browser
- Activate or deactivate cellular lines and monitor data to ensure you never incur overage charges

## INFRASTRUCTURE

- Hosted in a commercial-grade SAS 70-certified environment
- Superior availability, operating to 99.9% or greater
- Open APIs available to support application development

## SECURITY

- Certified SSAE-16 facilities
- Over 175 security controls in place to protect your data
- Enables compliance with security frameworks like PCI, HIPAA, NIST
- Earned SkyHigh's Cloud Trust Program highest rating of Enterprise-Ready

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
TX54-A146	Digi TX54 single LTE-Advanced Pro Cat 12, Wi-Fi, North America, CBRS, Sprint
TX54-A246	Digi TX54 dual LTE-Advanced Pro Cat 12, Wi-Fi, North America, CBRS, Sprint

PART NUMBERS	ACCESSORIES*
76002084	Digi TX54 accessory kit - single cellular
76002085	Digi TX54 accessory kit - dual cellular
76002086	Digi TX54 accessory kit - dual Wi-Fi
76002076	Digi TX54 power supply

\*Sold separately, unless otherwise noted.

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