



# Digi TX64 5G

High performance cellular router with dual redundant communications for complex transit and transportation systems

An Ideal for challenging transportation and mobile environments, **Digi TX64** is a 5G and 4G LTE-Advanced Pro cellular router with true enterprise class routing, security, firewall and integrated VPN. It offers a flexible interface design with an integrated Wi-Fi 6 access point, USB, serial and 4-port Gigabit Ethernet switch, as well as a variety of configuration options including GNSS with untethered dead reckoning (UDR) and multiple geofence support.

Internet access for riders is managed securely and without impact to onboard bus systems. Technologies like 5G NR, EN DC and carrier aggregation deliver up to Gigabit speeds to passengers. Onboard systems retain priority and remaining bandwidth is made available to Internet traffic.

A captive portal and splash page enable term acceptance, targeted messaging and agency branding. Standard HTTP/DNS redirect can be used to block malware and unwanted content through popular third-party service providers or an agency server. **Digi Remote Manager**<sup>®</sup> offers cloud-based deployment and management, plus secure terminal access for out-of-band management of edge devices via serial port and command-line interface.

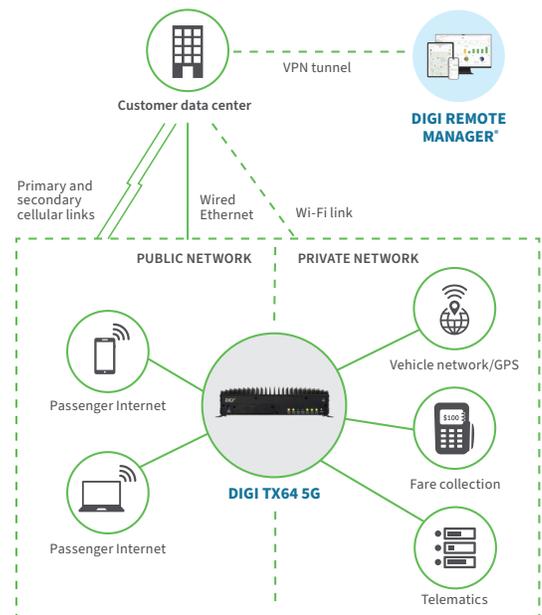
Digi TX64 features **FirstNet Trusted**<sup>™</sup> and **Verizon Frontline** support to meet the critical demands of first responders for emergency communications. Digi TX64 also meets the U.S. government cybersecurity **FIPS 140-2** standard and supports the **Digi TrustFence**<sup>®</sup> security framework to ensure it is secure on day one and stays secure throughout its life.

Reliable power circuitry supports 9 to 36 VDC input with ignition sense for direct integration into the vehicle's power source. Dual cellular and dual Wi-Fi modules provide true segmented traffic flow of private and public data for fare collection, CAD/AVL data, camera log backhaul and passenger Wi-Fi access.

## Key features, benefits and applications

- 5G platform: future-built with powerful quad-core processor
- Segmented private and public data communication with 5G NR Sub-6 GHz, 4G LTE-Advanced Pro and 4G LTE-Advanced modems
- **FirstNet Trusted**<sup>™</sup> and **Verizon Frontline** support for primary responders and emergency communications
- Meets U.S. government **FIPS 140-2** cybersecurity standard
- Wired Gigabit Ethernet (4-port) for onboard systems
- Video and vehicle data offload over Wi-Fi 6 4x4 backhaul, with passenger Wi-Fi over Wi-Fi 6 2x2 access point
- **Digi Remote Manager** cloud-native platform to easily deploy, mass configure and maintain in-vehicle devices
- **Digi SAFE**<sup>™</sup> complete solution for emergency vehicle connectivity
- 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

# 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](http://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](http://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](http://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 TX64 5G with Digi Remote Manager

SPECIFICATIONS		DIGI TX64 5G
<b>WIRELESS INTERFACES</b>		
<b>CELLULAR / WWAN</b>		
<b>5G NR SUB-6 GHZ WITH 4G LTE-ADVANCED PRO AND 3G FALLBACK (TX64-A161)</b>	<b>5G NR Sub-6:</b> n1, n2, n3, n5, n7, n8, n12, n20, n25, n28, n38, n40, n41, n48 CBRS, n66, n71, n77, n78, n79, C-band <b>4G LTE-Advanced Pro:</b> 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 <b>3G:</b> B1, B2, B3, B4, B5, B6, B8, B9, B19	
<b>4G LTE-ADVANCED PRO CAT 18 (TX64-A141)</b>	<b>LTE FDD:</b> B1, B3, B7, B8, B12, B13, B14 FirstNet®, B20, B25, B26, B28, B29; B30, B32, B48 CBRS, B66, B71 <b>LTE TDD:</b> B38, B39, B40, B41, B42, B43, B46 <b>3G:</b> B1, B2, B4, B5, B8	
<b>CONNECTORS</b>	(2) or (4) 50 Ω SMA per module (center pin: female)	
<b>SIM SLOTS</b>	(2) mini-SIM (2FF) per module (4 total)	
<b>SIM SECURITY</b>	SIM slot cover plate included	
<b>WI-FI</b>		
<b>TECHNOLOGY</b>	<b>Private backhaul:</b> Wi-Fi 6 (802.11ax), 5 GHz, 4 x 4 MIMO, up to 128 clients <b>Public Wi-Fi:</b> Wi-Fi 6 (802.11ax), 2.4 / 5 GHz, 2 x 2 MIMO, up to 128 clients	
<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>	Up to 8 access points and 1 client per Wi-Fi module (16 + 2 total)	
<b>CONNECTORS</b>	<b>Private backhaul:</b> (4) 50 Ω RP-SMA (center pin: male) <b>Public Wi-Fi:</b> (2) 50 Ω RP-SMA (center pin: male)	
<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: -160 dBm	
<b>PROTOCOL</b>	NMEA 0183 4.0, TAIP	
<b>CONNECTOR</b>	(1) 50 Ω SMA (center pin: female); +3.3 VDC active antenna drive	
<b>WIRED INTERFACES</b>		
<b>ETHERNET</b>		
<b>PORTS / CONNECTOR</b>	(4) RJ-45; 10/100/1000 Mbps Base-T (auto-sensing); IEEE 802.3; configurable as WAN or LAN	
<b>SERIAL</b>		
<b>PORTS / CONNECTOR</b>	(1) RS-232; DB-9 male (DTE)	
<b>USB</b>		
<b>PORTS / CONNECTOR</b>	(3) USB 3.0 Type A	

## DIGI TX64 5G

# Specifications and Warranty



Manage and configure Digi TX64 5G with Digi Remote Manager

SPECIFICATIONS		DIGI TX64 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		2 GB / 8 GB
PHYSICAL		
DIMENSIONS		260 mm x 196 mm x 67 mm (10.2 in x 7.8 in x 2.6 in)
WEIGHT		3.3 kg (7.25 lbs)
STATUS LEDS		Power, WWAN (signal, service), Wi-Fi service (per module), GNSS service, LAN (link, activity)
ENCLOSURE / RATING		Aluminum alloy / IP40
POWER REQUIREMENTS		
POWER INPUT		9 – 36 VDC, 60 W minimum power source required; ignition sense
POWER CONNECTOR		Screw down removable terminal block
POWER CONSUMPTION		28 W typical (idle); 41 W (peak RF Tx/Rx)
ENVIRONMENTAL		
OPERATING TEMPERATURE		-30 °C to 70 °C (-22 °F to 158 °F)
STORAGE TEMPERATURE		-40 °C to 85 °C (-40 °F to 185 °F)
RELATIVE HUMIDITY		0% to 95% (non-condensing) at 25 °C (77 °F)
NEMA		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 at 5 Hz to 30 Hz; Shock: 10 g)
APPROVALS*		
CELLULAR		PTCRB, AT&T, FirstNet Trusted™, T-Mobile, Verizon, Verizon Frontline; Visit <a href="http://www.digi.com/resources/certifications">www.digi.com/resources/certifications</a> for latest cellular certifications
SAFETY		UL 60950, EN 62368, CSA 22.2 No. 60950
VEHICLE		E-Mark (UNECE Reg. 10), SAE J1113-2, SAE J1455, ISO 7637-2/3, ISO 10605, ISO 16750-2 load dump
EMISSIONS / IMMUNITY		CE, FCC Part 15 Class B with IC, EN 303413, EN 301489-1/-19, CISPR 25, Level 3, ISO 11452-2, ISO 11452-4
ENVIRONMENTAL		MIL-STD-810G (temperature, humidity, vibration, shock, dust)
WARRANTY		
PRODUCT WARRANTY		3-year**

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

\*\*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 TX64 5G

# Software, Photos and Technologies



Manage and configure Digi TX64 5G with Digi Remote Manager

ENTERPRISE SOFTWARE	DESCRIPTION
PROTOCOL SUPPORT	HTTPS, FTP client, TLS v1.2, SNMP (v3), SSH; remote management via <b>Digi Remote Manager</b> ; 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, DMVPN; 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; <b>Digi SureLink</b>
OTHER PROTOCOLS	DHCP; dynamic DNS client compatible with No-IP/DynDNS; Nagios, DNS server, NTP server, mDNS, IPerf
LOCAL MANAGEMENT	Web interface (HTTPS); CLI (SSH, serial port); SNMP v2c/v3 read-only; custom factory configuration
MANAGEMENT / TROUBLESHOOTING PROTOCOLS	Protocol analyzer with PCAP for Wireshark, event and system logging (with syslog), accessible from <b>Digi Remote Manager</b> , SFTP or SCP, CLI, Web UI, Intelliflow
PROGRAMMING TOOLS / ENVIRONMENTS	Python v3 (regularly updated to newest version)

\*For a comprehensive list of operating system features, please visit [www.digi.com/solutions/by-technology/dal-operating-system/features](http://www.digi.com/solutions/by-technology/dal-operating-system/features).

## Product Photos

DIGI TX64 5G — FRONT



DIGI TX64 5G — BACK



## Featured 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 TX64 5G

# Part Numbers

PART NUMBERS	DIGI TX64
TX64-A161-PR	Digi TX64 Primary Responder — dual cellular 5G / LTE-Advanced Pro Cat 20, dual Wi-Fi, UDR, global, FirstNet Ready
TX64-A161	Digi TX64 — dual cellular 5G / LTE-Advanced Pro Cat 20, dual Wi-Fi, UDR, global
TX64-A141	Digi TX64 Primary Responder — dual cellular LTE-Advanced Pro Cat 18, dual Wi-Fi, global, FirstNet Ready, Verizon Frontline

PART NUMBERS	AVAILABLE ACCESSORIES*
76002087	Digi TX64-A141 / TX64-161 accessory kit — extended temperature power supply, 5G/GNSS antenna, 4G/GNSS antenna, (2) Wi-Fi antenna, Cat 5e Ethernet cable
76002089	GNSS Untethered Dead Reckoning — dash mount antenna
76002090	GNSS Untethered Dead Reckoning — roof mount antenna
76002121	Power supply — 100 to 240 VAC, 1.5 A input, 12 VDC output, 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, visit [digi.com](https://www.digi.com).



For more information about Digi TX64 5G,  
visit [www.digi.com/tx64-5g](https://www.digi.com/tx64-5g).

877-912-3444 | 952-912-3444

