Digi TX40 5G

Intelligent 5G wireless communications hub for public safety and fleet vehicles

An affordable, purpose-built solution for public safety and emergency vehicle fleets, **Digi TX40** breaks down communication silos and seamlessly connects the growing list of equipment in a vehicle into a fast and reliable vehicle area network (VAN). It enables you to digitally transform your fleet with latest generation wireless technology that is affordable, easy-to-deploy and centrally managed with **Digi Remote Manager®**.

Digi TX40 is available in 5G and 4G LTE-Advanced Pro with 3G fallback models that are **FirstNet Capable™** and support **Verizon Frontline** and **T-Mobile Connecting Heroes** to meet the critical demands of first responders for emergency communications.

High-resolution, real-time video provides the critical element of situational awareness for dispatchers, command staff and officers on the scene of a public safety incident. Digi TX40 with 5G and Wi-Fi 6 transfers critical information faster, further and more reliably.

Advanced Connectivity and Security for Public Safety

Digi TX40 connects vehicle equipment such as dash cameras, body cameras, license-plate readers, eTicket systems, and mobile data computers over Gigabit Ethernet, Wi-Fi 6, USB 3.0, and serial interfaces. And the latest dedicated multi-constellation GNSS receiver with Untethered Dead Reckoning (UDR) ensures that Dispatch knows the exact vehicle location.
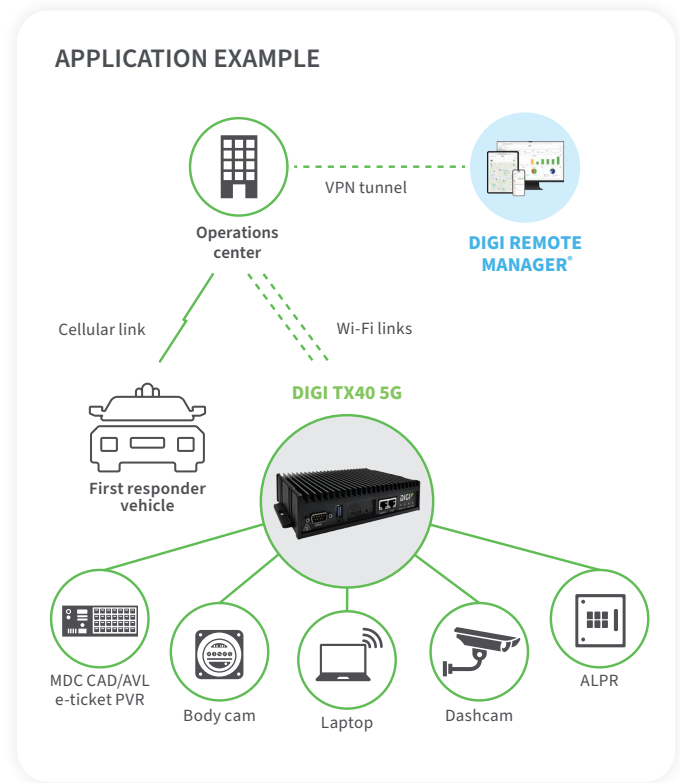
Digi TX40 is ITxPT-compliant to ensure interoperability and seamless integration with other vehicle systems for sharing connectivity, location and time, information and services — reducing complexity, points of failure and cost.

Cybersecurity is critical in today's communication systems, and vehicle area networks are no different. Digi TX40 meets the U.S. government cybersecurity **FIPS 140-2** standard and supports the **Digi TrustFence®** security framework to ensure it is secure on day one and stays secure throughout its life.

The complete **Digi SAFE™** solution, with the optional **Digi Mobile VPN** value-added service, enables IT staff to securely traverse multiple, independent networks simultaneously within one mobile VPN connection, assuring secure uninterrupted sessions with deployed devices in the field. Highly resilient application and session persistence with mobile encryption ensures constant, secure connectivity, and keeps officers and citizens safer, while minimizing response times.

Key features, benefits and applications

- Wireless communications hub with 5G and Wi-Fi 6 for next generation public safety connectivity
- ITxPT-certified for interoperability and seamless integration with other vehicle systems
- Meets U.S. government **FIPS 140-2** cybersecurity standard
- **FirstNet Capable™**, **Verizon Frontline** and **T-Mobile Connecting Heroes** support for primary responders
- Integrated with **Digi TrustFence** security framework
- **Digi Remote Manager** cloud-native platform to easily deploy, mass configure and maintain in-vehicle devices
- **Digi SAFE** 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

Operations center — VPN tunnel — DIGI REMOTE MANAGER®

Cellular link — Wi-Fi links

First responder vehicle — DIGI TX40 5G

MDC CAD/AVL e-ticket PVR — Body cam — Laptop — Dashcam — ALPR

Management

DIGI REMOTE MANAGER®

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.

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.

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, geo-fencing
- 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

DIGI®

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.

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.

Specifications

Manage and configure Digi TX40 5G with Digi Remote Manager

SPECIFICATIONS	DIGI TX40 5G
WIRELESS INTERFACES	
CELLULAR / WWAN	
TX40-A500: 5G NSA, 5G SA, 4G LTE-ADVANCED PRO	**5G NR bands:** n1, n2, n3, n5, n7, n8, n12, n13, n14, n18, n20, n25, n26, n28, n29, n30, n38, n40, n41, n48 CBRS, n66, n71, n75, n76, n77, n78, n79, C-band **4G LTE-Advanced Pro bands:** B1, B2, B3, B4, B5, B7, B8, B12, B13, B14 FirstNet®, B17, B20, B25, B26, B28, B29, B30, B32, B38, B40, B41, B42, B43, B46 LAA, B48 CBRS, B66, B71 **3G bands:** B1, B2, B3, B4, B5, B6, B8, B19
TX40-A400: 4G LTE-ADVANCED PRO, 3G HSPA+	**4G LTE-Advanced Pro bands:** B1, B2, B3, B4, B7, B8, B12, B13, B14 FirstNet®, B17, B18, B19, B20, B25, B26, B28, B29, B30, B38, B39, B40, B41, B42, B43, B48 CBRS, B66, B71 **3G bands:** B1, B2, B4, B5, B8, B9, B19
CONNECTORS	(2) or (4) FAKRA Code D (burgundy)
SIM SLOTS	(2) Nano-SIM (4FF)
SIM SECURITY	SIM slot cover plate included
WI-FI	
TECHNOLOGY	Wi-Fi 6 (802.11ax) dual-band (2.4 GHz and 5 GHz) concurrent 2 x 2 MIMO operation; backward compatible with Wi-Fi 5 (802.11ac) and Wi-Fi 4 (802.11n)
SECURITY	WPA, WPA2 and WPA3 Personal and Enterprise, Open and Open Enhanced security standards
HOTSPOT	Captive portal with customizable splash page, terms and conditions, shared password, user-specific password, RADIUS authentication
THIRD-PARTY SERVICES	Content filtering, embedded advertising
MODES	Simultaneous client and access point support
CONNECTORS	(2) FAKRA Code I (beige)
BLUETOOTH	
TECHNOLOGY	Bluetooth 5.2
GNSS	
TECHNOLOGY	GPS, Galileo, BeiDou and GLONASS with Untethered Dead Reckoning (UDR), multiple geofence support
SENSITIVITY	Tracking and navigation: −160 dBm
PROTOCOL	NMEA 4.11 and TAIP
CONNECTOR	(1) FAKRA Code C (blue)
WIRED INTERFACES	
ETHERNET	
PORTS / CONNECTOR	(2) RJ-45; 10/100/1000 Mbps Base-T (auto-sensing); IEEE 802.3; configurable as WAN or LAN
SERIAL	
PORTS / CONNECTOR	(1) RS-232; DB-9 male (DTE)
USB	
PORTS / CONNECTOR	(1) USB 3.0 Type A; 5 VDC 1 A max

Specifications and Warranty

Manage and configure Digi TX40 5G with Digi Remote Manager

SPECIFICATIONS	DIGI TX40 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	1 GB / 8 GB
PHYSICAL	
DIMENSIONS	198 x 138 x 44 mm (7.78 x 5.54 x 1.73 in)
WEIGHT	1 kg (2.2 lb)
STATUS LEDS	Power, GNSS, Wi-Fi, WWAN, Ethernet (link, activity)
ENCLOSURE / RATING	Aluminum / IP64
POWER REQUIREMENTS	
POWER INPUT	7 – 36 VDC, ignition sense
POWER CONNECTOR	Screw down removable terminal block
POWER CONSUMPTION	8 W typical (idle); 15 W (peak RF Tx/Rx)
ENVIRONMENTAL	
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	0% to 95% (non-condensing) at 25 °C (77 °F)
APPROVALS*	
CELLULAR	PTCRB, AT&T, FirstNet Capable™, T-Mobile, T-Mobile Connecting Heroes, Verizon, Verizon Frontline
SAFETY	IEC 62368-1, CB scheme
INTEROPERABILITY	ITxPT (certification expected by December 2023)
VEHICLE	E-Mark (UNECE Reg. 10)
EMISSIONS / IMMUNITY	CE, FCC Part 15 Subpart B with IC, UKCA
ENVIRONMENTAL	MIL-STD-810H (high and low temperature, vibration, shock)
WARRANTY	
PRODUCT WARRANTY	3-year

*Expected in 2023; visit 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.

Specifications, Partners and Technologies

**Manage and configure Digi TX40 5G
with Digi Remote Manager**

ENTERPRISE SOFTWARE	DESCRIPTION
PROTOCOL SUPPORT	HTTPS, TLS, SCP (client and server), SFTP, SNMP (v2c/v3), SSH, Telnet and CLI for web management; remote management via **Digi Remote Manager**; protocol analyzer, ability to capture PCAP for use with Wireshark; DynDNS, Dynamic DNS client compatible with No-IP/DynDNS; Captive portal, Intelliflow; Nagios, DNS server, NTP server, Multicast, mDNS, IPerf
SECURITY / VPN	IP filtering, stateful inspection firewall with scripting, address and port translation; VPN: IPSec with IKEv1, IKEv2, NAT Traversal, DMVPN; SSLv3, FIPS 197, Open VPN client and server; L2TP; VPN tunnels; cryptology: SHA-1, MD5, RSA; encryption: DES, 3DES and AES up to 256-bit (CBC mode for IPsec); authentication: RADIUS, TACACS+, SCEP for X.509; certificates; content filtering (via 3rd party); MAC address filtering; VLAN support
ROUTING	IP pass-through; NAT, NAPT with IP port forwarding; Ethernet bridging; GRE; multicast routing; routing protocols: PPP, PPPoE, RIP (v1, v2) OSPF, BGP, iGMP routing (multicast); IP failover: VRRP, VRRP+TM; automatic failover/failback to second GSM network/standby APN; **Digi SureLink**
EMISSIONS / IMMUNITY	DHCP; Dynamic DNS client compatible with No-IP/DynDNS; QoS via TOS/DSCP; Modbus UDP/TCP to serial; Modbus bridging for connecting diverse field assets

*For a comprehensive list of operating system features, please visit **www.digi.com/solutions/by-technology/dal-operating-system/features**.

Featured Partners and Technologies

Product Photos

Digi TX40 5G

DIGI TX40 5G — FRONT

DIGI TX40 5G — FRONT WITH SIM COVER

DIGI TX40 5G — BACK

DIGI TX40 4G — BACK

DIGI TX40 5G — TOP

DIGI TX40 5G — BOTTOM
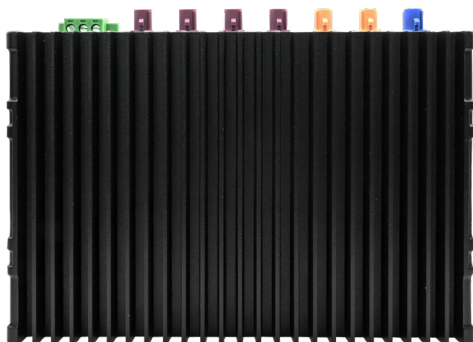
Part Numbers

PART NUMBERS	DIGI TX40
TX40-A500	Digi TX40 — 5G and 4G LTE-Advanced Pro, dual Ethernet, Wi-Fi 6, USB, RS-232, GNSS
TX40-A400	Digi TX40 — 4G LTE-Advanced Pro Cat 12 with 3G fallback, dual Ethernet, Wi-Fi 6, USB, RS-232, GNSS

PART NUMBERS	AVAILABLE ACCESSORIES*
76002136	Digi TX40 5G Accessory Kit — Extended temperature power supply, 5G/GNSS antenna, Wi-Fi antenna, Cat 5e Ethernet cable
76002137	Digi TX40 4G Accessory Kit — Extended temperature power supply, 4G/GNSS antenna, Wi-Fi antenna, Cat 5e Ethernet cable
76002138	Digi TX40 ITxPT Kit — Power connector adaptor, (2) M12/RJ-45 Cat 5e Ethernet cables
76002121	Power supply — 100 - 240 VAC, 1.5 A input, 12 VDC, 5 A 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 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.

For more information about Digi TX40 5G,
visit **www.digi.com/tx40-5g**.

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