

# **BUS TRANSIT CONNECTIVITY SOLUTIONS**

# Data Communications for Bus Transit

Public and private transit agencies manage hundreds of vehicles deployed across wide geographic regions. The success of managing these fleets is dependent upon reliable mobile communications solutions. Management teams need visibility regarding what's going on in the field. Buses need to be able to securely collect fares, access CAD/AVL data, upload camera logs, provide passenger Wi-Fi, and more. Moreover, the hardware they utilize needs to be able to segregate and prioritize those activities to ensure optimal data connectivity. The team of experts at RTO has the solutions they need.

#### Business Needs Upgrading Fleet Connectivity

Many transit agencies are operating with legacy Computer-Aided Dispatch (CAD) and Automatic Vehicle Location (AVL) systems built on analog radio networks. Sometimes they own the radio towers, other times they lease them, but in both situations their are high costs associated with expanding and upgrading outdated technologies. Ultimately many transit agencies are in need of a full overhaul to more reliable, cost-effective, and modern communications solutions. They need solutions capable of advancing with the times and delivering the strong connections and real-time data they need.

### Solutions Provided | Purpose-Built Cellular Hardware

To connect all their public transit clients internal and external systems and devices, our customers need the rugged, secure, and reliable data communications infrastructure the team at RTO is uniquely equipped to provide. Our expert team provisions and installs purpose-built cellular router and antenna kits within each and every one of your clients' fleet vehicles. The solutions we help you deliver utilize equipment from only the most trusted manufacturing partners like those we have featured within this solution brief.

#### Wireless Routers Digi TX64 LTE-Advanced Vehicle Router

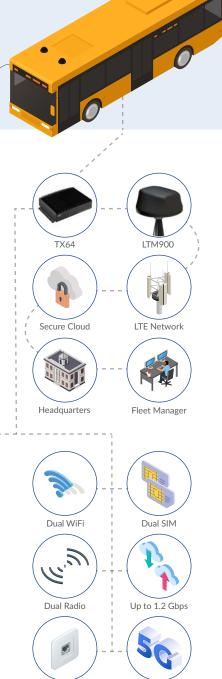
Ideal for challenging public transit environments, Digi TX64 is a dual cellular LTE-A and LTE-A Pro router with true enterprise class routing, security, firewall and integrated VPN. It offers a flexible interface design with an integrated Wi-Fi access point, USB, serial and 4-port Ethernet switch, as well as a variety of configuration options including GNSS and Bluetooth®. Internet access for riders is securely managed without impact to onboard bus systems.

Triple carrier aggregation on each cellular interface can be combined to deliver up to 1.2 Gbps to passengers. Onboard systems retain priority and any remaining bandwidth is made available to Internet traffic. Dual cellular and dual Wi-Fi modules provide true segmented traffic flow of private and public data for fare collection, CAD and AVL data, camera log backhaul, and passenger Wi-Fi access.



RTO helps clients deliver transit agencies the end-to-end communications solutions they need to support their mission-critical operations.

5G Ready





## Device Management | Digi Remote Manager®

Digi Remote Manager® (Digi RM) is the technology platform that brings networks to the next level, allowing networks — and the people who manage them — to work smarter.

It transforms a multitude of dispersed mobile IoT devices into a dynamic, intelligent network. You can also easily extend your network at scale with bi-directional, open integration and add intelligence to the edge with custom code, APIs and scripts.

All the while, its' software-defined security diligently safeguards your Digi ecosystem.





# Multi-Band Antennas | LTMG602 and LTM601

To boost the WiFi range, cellular coverage, and GPS accuracy of each Digi router we recommend a pairing of two Mobile Mark LTM series antennas (also available in 5G ready variants).

Within just two low profile LTM series units their are 15 different elements; 8 cellular, 6 WiFi, and a single GNSS. Along with the TX64 both antennas provide each vehicle with two 4x4 MiMo cellular, 4x4 Wi-Fi WAN, 2x2 Wi-Fi AP, and GPS Glonass.

Each LTM900 series antenna is rugged built to MIL-STD-810G specs and after proper mounting by one of our on-site install technicians has an IP67 rating.

#### Why Choose RTO?

For over 15 years RTO has provided communications solutions to businesses that deliver connectivity to public transit agencies. We help resellers, integrators, and OEM's engineer and deliver cellular solutions that utilize top-tier devices and equipment from the most trusted manufacturers worldwide.

Our DevProv+ services team configures, provisions, kits and ships your devices hot and ready for immediate use. And our installation teams ensure your devices are functioning securely, reliably, and at peak performance.

Reach out to RTO today to rapidly deploy cellular solutions that meet your clients' exacting mobile connectivity needs.



#### CONTACT RTO TO ENGINEER YOUR MOBILE CONNECTIVITY SOLUTION TODAY



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