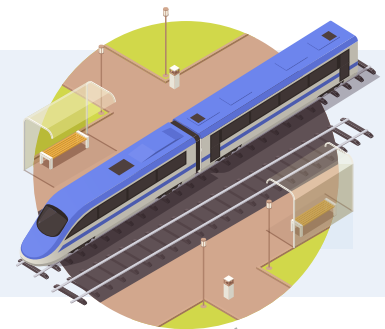


# RELIABLE AND RUGGED RAILWAY COMMUNICATIONS

## PTC Compliance for Railway Operations

While every rail service hopes to ensure riders enjoy the most pleasant travel experience possible, their foremost mission is to provide the safest riding experience and environment possible. In recent years, tragic accidents have called attention to the need to ensure that safety is the most fundamental principle of the transit industry. Nationwide, commuter rail services are establishing a safety-first culture for riders and employees alike.



### Business Needs | Mobile Railcar and Locomotive Connectivity

One of the key initiatives to achieving the goal of a safety-first culture has been compliance with the congressional mandates for railways to implement Positive Train Control (PTC) - a sophisticated train-signaling system designed to prevent crashes, derailments and track worker injuries resulting from speed and signal violations. With PTC in place, connected equipment monitors and controls train movements and speeds, preventing the train from moving until on-board equipment receives a positive indication that it is safe to travel from a centralized dispatching authority. Transit authorities need the best, toughest, and most reliable connectivity devices possible to ensure these vital communications never fail.

### Solution Overview | Rugged Cellular Routers and Antennas

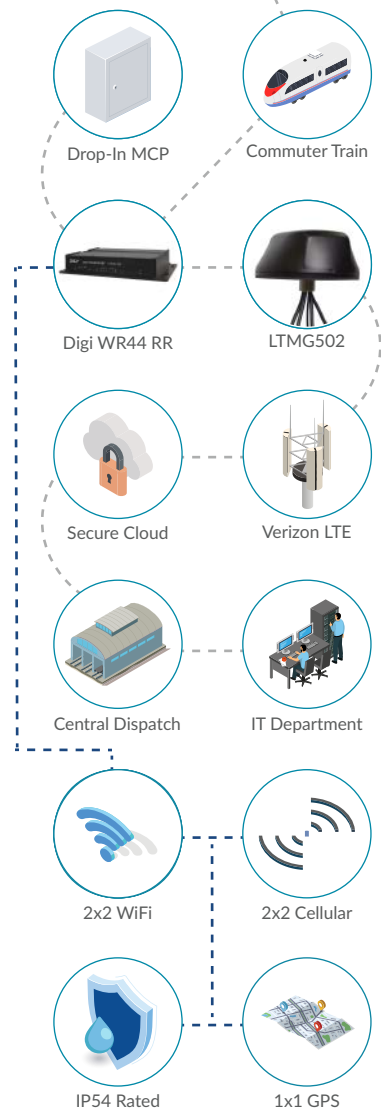
Many commuter rail systems in the US are achieving PTC compliance. And a key factor in this achievement is their decision to deploy Digi WR44-RR cellular routers. PTC message routing and wireless communications are made possible by using Mobile Communications Packages (MCP) - integrated drop-in assemblies that can house the WR44 RR, a 220 MHz TDMA radio, power supply, and RF filters. The WR44 RR is the choice communications hub for all locomotives, relaying PTC data messages to and from waysides via 220 MHz radio while enabling remote maintenance, configuration, and network management over a cellular link. And when connected to a Mobile Mark LTMG502 antenna, signal strength and reliability - both wired and wireless - are greatly enhanced.

### Benefits Observed | Improved Railway Management and Safety

With PTC systems and equipment in place transit authorities are seeing improvements in their railway traffic safety in several ways. These systems are regulating train separation, avoiding train-to-train collisions at track crossovers, enforcing permanent and temporary speed restrictions, protecting rail worker wayside safety zones, regulating out of service grade crossings, preventing trains from running over switches set in the wrong position and more. All made possible by fast, rugged, and reliable cellular communications.

### Our Team | Device Provisioning, Activation, and Installation Services

RTO has provided cellular equipment to systems integrators that service transit authorities for the last 18 years. We provide top-tier support for each and every aspect of your clients' mission-critical fixed and mobile communications projects. Our solutions team configures, provisions, kits, and ships all your devices hot and ready for immediate use. And when you utilize our installation services, our technicians ensure each device is functioning securely, reliably, and at peak performance on ultra-fast network carriers like Verizon.



Rugged Router: <b>WR44 RR</b>	Cloud Software: <b>Digi RM®</b>	Rugged Antenna: <b>LTMG502</b>	Carrier Network: <b>Verizon</b>
----------------------------------	------------------------------------	-----------------------------------	------------------------------------

CONTACT RTO TO ENGINEER YOUR CONNECTIVITY SOLUTION TODAY



By Phone: (919) 442-0038  
By Email: info@realtimeops.com