



RELIABLY INNOVATIVE
TRANSIT SOLUTIONS

CALL +1 888 895 0995

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ABOUT PIPER

Piper Networks is an innovative rail engineering solutions provider and systems integrator specializing in the development of transportation technologies. Founded in 2011, Piper has five primary product lines that serve the industry, including: Vital Train Positioning, Maintenance of Way (MOW) Protection, Automatic Train Protection (ATP), Grade Crossing Safety, and Passenger Information Display Systems (PIDS). Piper's proprietary Ultra Wideband (UWB), GPS-RTK, and patented TrackSight™ LiDAR positioning technology are designed to operate in some of the most challenging transportation environments, including tunnels, while maintaining pinpoint accuracy that improves performance for train operators and train control suppliers.



RAIL SOLUTIONS

PIPER HELIX LIDAR, UWB, GPS-RTK, IMU LIMITS COMPLIANCE & COLLISION AVOIDANCE SYSTEM

Helix™ is an advanced, multi-sensor Limits Compliance and Collision Avoidance System (LCCAS) that integrates LiDAR, UWB and other technologies. The Maintenance of Way (MoW) safety solution allows for fleets of rail-bound and hi-rail equipment to be accurately detected and tracked on the railroad in real-time, thereby reducing the potential for worker injury, equipment damage, and operational disruptions resulting from accidents or major rule violations.

PIPER ETL5 SIL-4 SAFETY CERTIFIED UWB VITAL UWB TRAIN POSITIONING

Piper's ETL5 (Enhanced Transit Location System) uses Ultra Wideband (UWB) Technology to track the location and movement of trains, vehicles, equipment, people and other objects in real-time for various location awareness needs. Piper's ETL5 determines the location of trains throughout a system in real-time with unmatched positional certainty. The system is like a blanket of radio coverage over the subway lines - virtually surrounding the tracks with smart sensors that pinpoint train location down to a few inches.

PIPER SECURETRACK UWB, GPS-RTK, WEARABLES WORK ZONE AWARENESS AND ROADWAY WORKER PROTECTION (RWP)

Piper's SecureTrack solution improves safety for train operators and track workers during railway maintenance. It uses smart sensors, wearables, and a work zone management platform to localize trains, maintenance vehicles, and workers within centimeters. It then communicates their locations in real-time to approaching trains, Employees-in-Charge (EIC), and the Rail Control Center. A tablet-based mobile EIC application integrates with Rail Control Centers, allowing remote real-time management of Maintenance of Way (MOW) fleets. Operators also receive alerts for overspeeding, work zone limits, nearby vehicles and obstacles, and approaching transit points of interest.

VIDEOS



Watch Video

LOCATIONS

California (HQ)	San Diego
Delaware	Wilmington
New York	New York City

MEDIA INTERVIEWS

Robert Hanczor CEO

Areas of Expertise:

Train Localization, Maintenance of Way Safety, Roadway Worker Protection, Grade Crossing Safety, Automatic Train Protection (ATP), Ultra Wideband, LiDAR, GPS-RTK.



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WORLD'S FIRST SIL-4 SAFETY CERTIFIED UWB TRAIN POSITIONING SYSTEM

Recently, Piper Networks received a CENELEC Safety Integrity Level 4 (SIL-4) Certification for its Ultra Wideband (UWB) train control system from independent safety assessor, TÜV SÜD. The certification is a milestone achievement for Piper and the transportation industry as it becomes the first ever UWB-based position and speed technology to achieve vitality. The system is now ready for integration with signaling and train control programs being implemented by transportation agencies and their engineering contractors in the US and worldwide.



PROJECT: AMTRAK MOW

Amtrak selected Piper's innovative Limits Compliance and Collision Avoidance System (LCCAS) to protect and monitor their Maintenance of Way (MOW) vehicles to ensure safe operation. Piper is equipping hundreds of Amtrak's rail-bound and hi-rail equipped vehicles in the Northeast corridor with Piper's advanced LCCAS devices and delivering real-time telematics data to Amtrak's dispatch system.



PROJECT: MTA SIGNALING

Piper's ongoing UWB project with MTA has delivered cutting edge train positioning solutions. Piper, in partnership with Thales, was awarded a Pilot Program for an Ultra Wideband Based Train Control System to be installed on the 7 (Flushing) Line. The UWB RPS provides the absolute reference locations on the guideway to the OBCU which uses the data to initialize localization of the train and re-localize, as needed.



PROJECT: MTA PIDS

Piper developed the technology that runs the new MTA countdown clocks at B Division station platforms and mezzanines. Our low-power Bluetooth radios are installed on every train in the B Division, including the 7 Line, and communicate with wayside gateways in stations to power the countdown clock arrival information.

