



TRAINwise
Powered by QuesterTangent

Passenger information and security systems

TrainWise is a flexible, comprehensive solution for passenger trains and locomotives that employs leading edge technology in a rail-robust package. This suite provides a unified interface to monitor and manage all on-board electronic vehicle systems. This means easy integration for rail manufacturers, enhanced operational and maintenance management for transit authorities, and a superior passenger experience.



Communication is key

Trains are all about moving people, and to do that effectively, passengers need to feel safe and comfortable. As the population grows, meeting these expectations for a wide demographic of riders presents a significant challenge to fleet operators.

Many existing passenger information systems (PIS) are outdated and poorly integrated with other vehicle systems. In addition, weak performance can diminish the ability of travelers and operators to communicate and can deter customers from choosing rail as a transit option.

A tailored and efficient system with high audiovisual quality is key to creating a desirable onboard environment and increasing ridership.

Flexible solutions for demanding riders

Whether it is a new railway or a modernization project, Quester Tangent has the service-proven technology and expertise to deliver a complete suite of on-train passenger information and security products that address the evolving needs of travelers.

Our TrainWise passenger information and security offer includes servers, infotainment displays, automated signage, crew and passenger intercoms, and CCTV systems. This all-in-one solution enhances rider comfort and peace of mind while empowering operators to communicate effectively with commuters and crew.

TrainWise passenger information and security works easily with other TrainWise and third party on-board systems. Coupled with Quester Tangent's system integration and project management expertise, this flexible, robust system provides powerful tools to respond to customer needs both now and in the future.

Operational benefits



A dynamic solution for everyday needs

Keep commuters informed and satisfied with minimal operational and maintenance effort. The TrainWise passenger information and security system consists of real-time route maps, public address equipment for live and pre-recorded audio announcements, automatic destination signs, and infotainment displays to help travelers easily plan their trips. Our passenger information and security products are designed to offer excellent sound quality through advanced audio signal processing and active volume adjustment to surrounding noise levels. Bright, readable displays automatically adjust to ambient light conditions for excellent visibility.



Increased security

Give train operators and crew the tools they need to analyze and respond to incidents faster by allowing them to monitor passenger traffic and activity from a cab display. Using a TrainWise mobile gateway and **FleetWise** software, wayside staff can view live feeds or automatically downloaded videos to provide analysis and support to operators. Emergency intercoms and a public address system heighten customer satisfaction by helping passengers feel more secure.



Better train visibility and flexibility

Purchase our passenger information and security system as a stand-alone package or fully integrated with other TrainWise or third party products. Configurable on-train servers keep passenger information and security operations running smoothly in the background while simultaneously allowing train operators to view video or initiate audio communication at will. This approach achieves maximum flexibility and higher levels of convenience and on-time performance.



Long-term benefits



Digital architecture built for the future

Give commuters the same Wi-Fi and multimedia experience on the train as they get at home. Built on modern Ethernet technology, the TrainWise passenger information and security system generates both high quality digital audio and video, and enables a rich multimedia experience for users. Thanks to its innovative daisy-chain network topology, our system provides an easy and flexible installation. For operators, this means reduced initial vehicle budget, easier maintenance and happier passengers.



Valuable data at your fingertips

Get a better overall picture of train incidents. Access recorded video to review passenger activity and correlate it with system events. When integrated with an optional TrainWise event recorder and crash hardened memory module, operators can secure valuable information in the event of a crash or major incident. This supports a swift response to operational issues and emergency situations.



Built-in investment protection

Reduce your total cost of ownership. To protect your investment, we provide **TestWise** for rapid troubleshooting of on-board electronics and back our equipment with our **2/20/40** life cycle support program, which includes an active **two year** warranty for new products, **20+ years** extended support and **40+ years** modernization support. This comprehensive approach maximizes the useful life of our products and allows for a proactive approach to maintenance.





Server products

Passenger Information Servers

The TrainWise Passenger Information Server manages automatic and live announcement, interior/exterior sign control, and infotainment content for the vehicle.

This powerful server maintains a database of audio, video and sign data for the whole fleet, accessible from on-board or the wayside control center. Content can be played manually or triggered by conditions such as run number, location or train speed.



Closed Circuit Television Servers

The TrainWise Closed Circuit Television (CCTV) Server is the storage hub for on-board CCTV data. It integrates easily with other train systems to provide a comprehensive surveillance solution.

Video recording is continuous or triggered by on-board events such as passenger emergency intercom use or door control override.

Stored video can be viewed from within the cab, downloaded to a portable device, or sent to the wayside. Video data is time-stamped, watermarked and encrypted to support incident investigation.



Displays

Providing a window into the integrated passenger information and security system, TrainWise displays are elegant, easy to use, and ruggedly designed for the on-train environment. TrainWise offers a wide range of display products suitable for train operators and maintenance personnel, from compact and simple to fully integrated touchscreen units with on-board processing, Ethernet communications and discrete I/O.





Controller products

Infotainment Display

Our full-color on-board Infotainment Displays provide high quality multimedia and entertainment content to passengers.

All TrainWise displays incorporate graphical user interface features that can be tailored to the needs of fleet operators.



Passenger Information System Gateway

The TrainWise Passenger Information System (PIS) Gateway manages Ethernet network connectivity for all PIS components. This gateway includes support for advanced audio protocols to ensure precise audio synchronization and maximal clarity across all PA amplifiers and speakers.

This tool provides the bridge between the Ethernet networks in each car and other vehicles in the train consist, allowing seamless operation across a multiple-car train of any length.

The TrainWise Passenger Information and Security solution also provides an AAR-compliant crew radio for secure communications between cab operators and wayside.

Passenger Emergency Intercom Station

The Passenger Emergency Intercom Station enables passenger emergency communication between travellers and the train crew through the push of a button.

Once initiated by the passenger, communication is controlled by train crew through the Communication Control Panel. The Passenger Emergency Intercom Station provides superior sound quality through digitized audio transmission and automatic volume control.



Crew Communication Panel

The TrainWise Crew Communication Panel gives the train operator complete control of all communications through a single, integrated unit.

With an intuitive touchscreen interface, this controller links with all cab audio equipment, including microphones, speakers and train radio. It connects through the on-board Ethernet network to other Crew Communications Panels, the Public Address Amplifiers and the Passenger Emergency Intercom stations to configure and support audio communications throughout the train.





Peripheral products

Public Address Amplifiers

By interfacing with the passenger information and security Ethernet network, this product delivers noise-free digital audio to passengers.

Multiple speakers can be driven from four independent channels with separate volume control. The volume is adjusted automatically using background sound level measurements from the PEI stations.



Announcement Sign

The TrainWise passenger announcement signs provide riders with continuous station stop and route information updates.

Messages are displayed using super-bright dot-matrix LEDs supporting both alpha-numeric characters and custom symbols. Messages can be displayed statically or with moving text in marquee, scrolling or flashing mode.



Destination Sign

The TrainWise passenger destination signs allow riders standing on the platform to see information about the train route and destination prior to boarding using single or double-sided announcement signs and two-line destination signs.

These signs use high quality displays that are cost-effective, low-power, and low-maintenance. Using dot-matrix LED display for high visibility and readability, messages can be displayed automatically or controlled by the train operator.



Active Route Map

The TrainWise route map provides passengers with an electronic map that shows the train's current route.

This customized route map has LED indicators - synchronized with PA announcements and destination signs - to display the current train location.





Partner in operational efficiency

Founded in 1983, Quester Tangent is a leading North American supplier of train electronics and software solutions for the passenger rail and locomotive industries. Quester Tangent features a complete portfolio of rail technology products: **TrainWise**, flexible on-board train and locomotive electronics, **FleetWise**, innovative wayside software and **TestWise**, comprehensive test equipment products.

The TrainWise suite encompasses monitoring, diagnostic and control products, event recorders, on-board trainline and wireless network communications, passenger information systems, and CCTV products. This service-proven turnkey solution provides rail manufacturers and transit authorities with superior reliability, improved operational performance, advanced diagnostics, and enhanced rider comfort and peace of mind.

Contact Quester Tangent today at 1 855 510-7837 and find out how a TrainWise passenger information and security system will help you.

QUESTERTANGENT
Delivering Train Electronics

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