

TRACKSIGHT™

by piper

TRAIN-CENTRIC LIDAR POSITIONING TECHNOLOGY

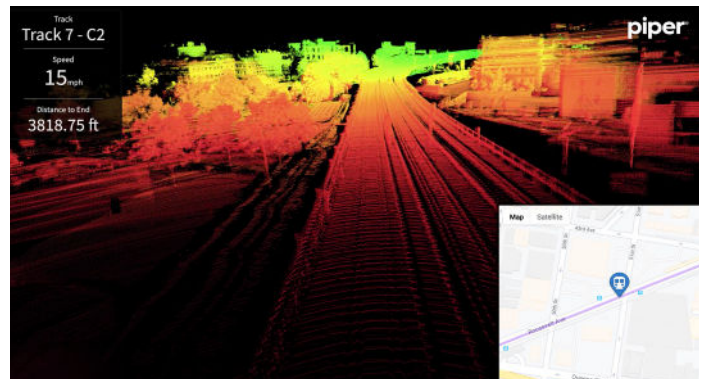
TrackSight™ is Piper's latest innovation that employs patented positional imaging to determine the location of trains and other vehicles within transit systems. TrackSight™ is the next evolutionary step that moves rail operations from the trackbed to the train itself which makes deployments and maintenance faster, safer and more cost effective.



The TrackSight™ device is a small solid state LiDAR.

One of the major challenges facing transit operators today is the installation and maintenance of trackbed or wayside equipment. These are typically tedious to install, require expensive GO's, and can be unsafe for workers. TrackSight™ requires no track or wayside components resulting in faster, easier and safer train positioning.

TrackSight™ is a fully deterministic solution that uses Piper's Solid State LiDAR technology to compare real-time imaging to an onboard database. The train-centric solution delivers



TrackSight™ provides highly detailed, real-time images..

precise positioning, even in dark tunnels where various objects and reflective paint can be used as reference points. It can also be installed alongside Piper's Ultra Wideband (UWB) to provide consistent and redundant positioning data to an onboard system. Unlike AI or machine learning technologies, the design is safety certifiable to a Safety Integrity Level 4 (SIL-4) standard and the data structure is compatible with the positioning data provided by Piper's UWB systems, meaning there would be no software changes required of the CBTC Suppliers to migrate from UWB to TrackSight™.

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

