

# 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.

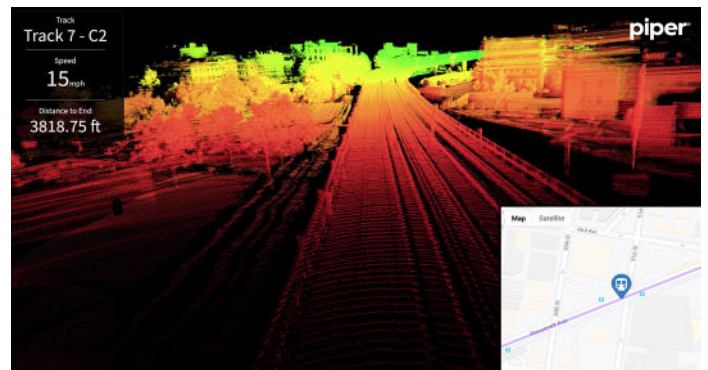


The TrackSight™ device is a small solid state LiDAR.

Understanding the precise location of rail-bound vehicles on a track is paramount to ensuring safe operation of the railway system. One of the major challenges facing transit operators today is the installation and maintenance of trackbed or wayside equipment for these solutions. 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 precise positioning, even in dark tunnels where various objects and reflective paint can be used as reference points.



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

Piper has paid attention to the rail industry's stringent safety requirements and the need for interoperability to make the technology easy to integrate and deploy. Unlike AI or machine learning technologies, the design is safety certifiable to a Safety Integrity Level 4 (SIL-4) standard. The data structure is also compatible with the positioning data provided by Piper's other positioning systems that use Ultra Wideband (UWB) and GPS-RTK. It can be installed alongside those systems and provide consistent and redundant positioning data to an onboard CBTC system, for example. And because it requires no track or wayside components, installation and maintenance costs are dramatically reduced.

Piper's TrackSight™ LiDAR system is also capable of object and worker detection. It can calibrate to focus its field of view towards the direction of the track for the purpose of detecting any obstacles which could result in a collision with the operating vehicle.

