

YardFlow™

Optimized AI Perception for Uninterrupted Yard Continuity

Rail Vision's YardFlow™ is a high-performance perception solution designed for industrial and freight yard operations.

Powered by high-sensitivity electro-optical sensors and proprietary deep learning algorithms, YardFlow detects on-track and near-track hazards at distances of up to 200 meters (650 ft). The system provides real-time alerts to help operators prevent incidents, maximize uptime, and maintain continuous switching operations.



200 m

Real-time hazard detection range — up to 650 ft ahead

24/7

Operational in low-visibility and challenging yard environments

Railway-Grade

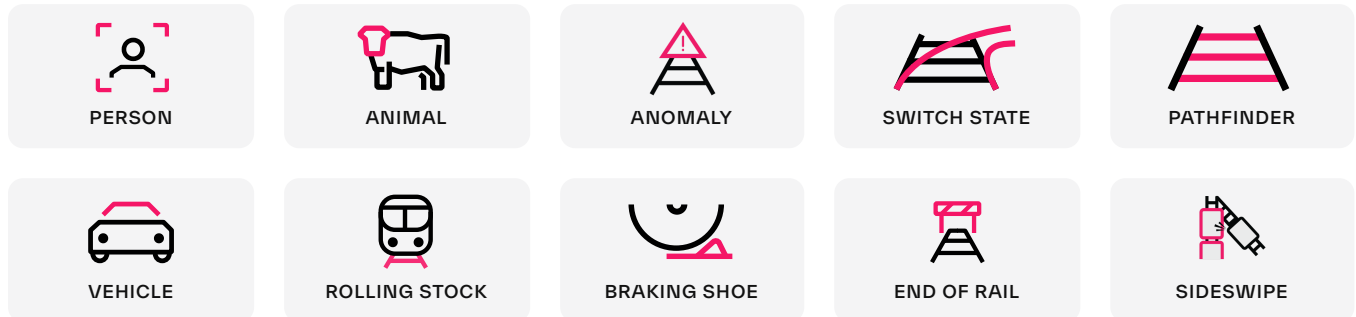
Engineered for international railway standards

Intelligence Driven by Big Data

Designed to enhance efficiency and safety, our **operational intelligence platform** acts as a complementary solution across our entire product line. It centralizes system-wide data collection to deliver real-time tracking, continuous event recording, and remote health monitoring. By leveraging big data analytics, the platform delivers actionable insights and customizable reports to key stakeholders across the organization.

System Detection & Classification Capabilities

The system dynamically detects and classifies a wide range of objects and track conditions, with the flexibility to add new classes as operational needs evolve. Key capabilities feature industry-first **switch state detection** (including switches aligned against the locomotive), **anomaly detection** for unclassified hazards, and **sideswipe detection** to identify rolling stock extending beyond the foul line.



Operational & Business Benefits

01

Yard Continuity & Incident Prevention

Prevent collisions, yard derailments, and unplanned downtime through early hazard detection, keeping switching operations safe and uninterrupted while protecting crew and yard assets across low visibility conditions.

02

Real-Time Situational Awareness

Eliminate driver blind spots across complex yard environments with real-time audio and visual alerts that support safer operations and path navigation.

03

Cost Effectiveness & Asset Protection

Minimize high-expense operational disruptions, preserve asset value during controlled coupling using a cost-effective solution that maintains continuous workflow across railyard and switching operations.

Technological Advantages & Reliability

Advanced Optical Sensors

High-sensitivity electro-optical sensors provide the data for AI-powered, real-time perception, delivering reliable situational awareness in challenging environments.

Automatic Braking Interface

An optional interface that connects with existing locomotive control systems for active intervention, enabling automatic emergency braking if an operator does not respond to a critical alert.

Intuitive Operator Interface

Delivers clear visual and acoustic alerts prioritized by operational risk for quick decision-making.

Modular Structure for Easy Adaptation

A compact, modular design enables simple installation across switching locomotives and railcar movers in both freight and industrial rail operations.

Compliance with Railway Standards

Engineered to meet international rail standards for railyard operations, safety, reliability, and environmental compatibility.

