



Rail Vision
INTELLIGENCE ON TRACK

SHUNTING YARD SYSTEM

**Streamlining shunting yard operations,
bringing safety to new levels**

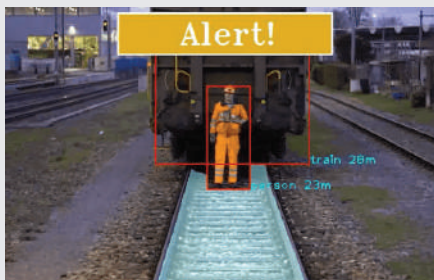
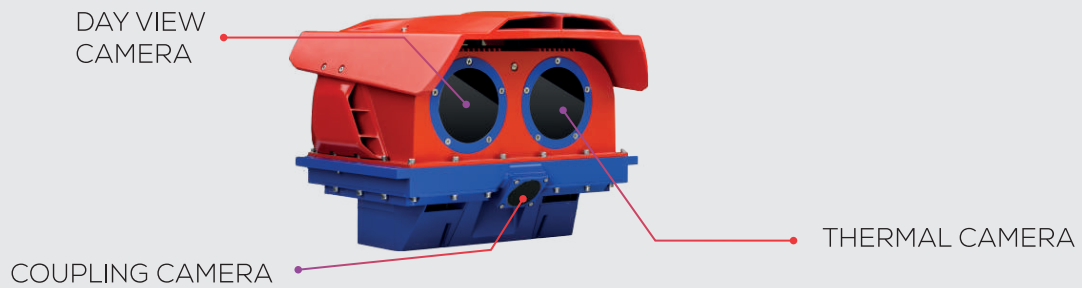
Until today, few innovations have been made to improve safety during shunting operations. Rail Vision's Shunting Yard System is designed to significantly reduce the risks at the shunting yard, while streamlining operations and enhancing safety.



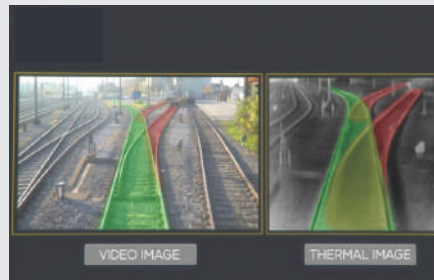
- ◀ Increases safety
- ◀ Detects & classifies objects with a range of up to 200m
- ◀ Driver Assistant Early Warning System – with audio and visual alerts
- ◀ Provides automatic obstacle detection & classification – detects and segments all types of objects
- ◀ Withstands vibrations and shock, operates in harsh weather and light conditions
- ◀ Customizable scalability
- ◀ Integrates with existing sub systems
- ◀ Option to be remotely controlled

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SHUNTING YARD SYSTEM



Obstacle detection & classification



Visual & thermic pathfinder



Rail Vision system mounted on locomotive

Detection and classification up to 200m in all weather conditions

Rail Vision's Shunting Yard System improves efficiency with cutting-edge technology that combines advanced vision sensors with artificial intelligence and deep learning technologies, to automatically detect and classify objects within a range of up to 200m, regardless of weather and light conditions. In addition, it ensures a safe and secure environment by monitoring operational dead zones to help secure wagon coupling and sending real-time visual and acoustic alerts to remote operators and drivers.

Unique pathfinder technology

With its one-of-a-kind pathfinder technology, the Shunting Yard System can detect switch states to support the execution of coupling from a remote position, making shunting yards safer. Shunting yard workers can quickly and easily use and integrate our solution, saving time and increasing efficiency.

SHUNTING YARD SYSTEM



KEY FEATURES AND SPECIFICATION



HUMAN
DETECTION



BREAKING SHOES
DETECTION



END OF RAIL /
BUFFER



LOCOMOTIVE



WAGON



VEHICLE
DETECTION



REMOTE
CONTROL



SIGNALING



AUTOMATIC
EMERGENCY
BREAKING



SWITCH
STATE

INTERFACE TYPE	FEATURE	FIGURES & DETAILS
Mechanical	Size-sensor unit (SU)	320x332x255 mm
	Size-computing unit (CU)	468x427x176 mm
	Installation	IAW drawing (adaptation per platform)
Temperature	Operating temperature	-20° to +55°C
Electrical	Input voltage	100-240 VAC
	Power	> 1200
	Monitor	Display port (option for HDMI)
	Audio	Embedded in video
Communication	Network	Ethernet
		CAN
		3G, LTE (optional)
Detection range	Pathfinder	Up to 100 m
	Switch state	Up to 50 m
	Human	Up to 150 m
	Vehicle	Up to 200 m
	End of rail	Up to 80 m
Standards	Environmental operating conditions	Compliant EN 50155, EN 61373, EN 60529
	Safety Standard	Compliant EN 50126, EN 50657
	Fire Protection	Compliant EN 45545
	Electromagnetic compatibility	Compliant EN 50121
	10 - 95% RH, Non-condensing	Compliant



About Rail Vision

In today's increasingly complex rail industry, Rail Vision provides an extra level of safety, security and performance with visibility at distances far beyond the reach of the human eye. Using advanced obstacle detection & classification technology, Rail Vision detects objects on and along the tracks from a distance in real time and under most weather and light conditions – paving the way to a safer, more efficient rail future.