



Looking ahead. Taking you beyond.

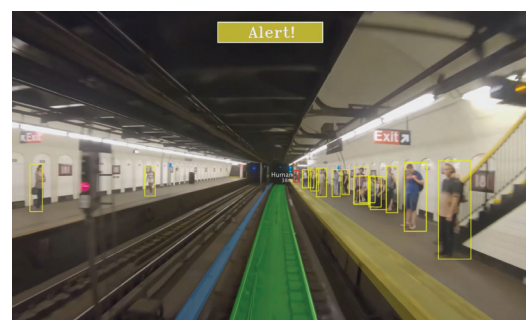
# RAIL VISION'S SYSTEM FOR URBAN RAIL VEHICLES



## Collision avoidance for the urban environment

With the combination of electro-optic sensors, artificial intelligence and deep learning technologies, Rail Vision's Urban Rail Vehicle System is specifically designed to identify potentially dangerous situations in urban traffic, on the track or on station platforms. The system detects and classifies obstacles within the predefined area of interest at a range of typically 200 meters, to increase safety in the urban environment. In case of a potentially dangerous situation, it generates visual and acoustic alerts. Future add-on features such as Image-based Navigation help to create and validate GIS files, and overcome line-of-sight limitations resulting from urban topology.

- Driver Assistant Early Warning System
- Increases safety
- Provides automatic obstacle detection & classification
- Operates in harsh weather & light conditions
- Overcomes limited visibility
- Detects operative range up to 200 meters
- Integrates with existing sub systems
- Customizable scalability



Platform Passenger Safety



Human detection on rail

## LRV sensor & computing unit



### Technical Specifications

Interface type	Feature	Figures & Details
<b>Mechanical</b>	Size – sensor unit (SU)	70 x 70 x 100 [mm]
	Size – computing unit (CU)	150 x 150 x 100 [mm]
	Max distance between SU and CU	150 mm
	Installation	IAW drawing (Adaptation to platform)
<b>Temperature</b>	Operating temperature	-20° to +50° C
<b>Electrical</b>	Input voltage	12VDC (Adaptation to platform)
	Power	<50W
	Monitor	Display port (Option for HDMI)
	Audio	Acoustic alters
<b>Sensor Unit</b>	Color camera	39° FHD
	Thermal sensor	24° VGA
<b>Communication</b>	Network	Ethernet
		CAN
<b>Detection</b>	Pathfinder	Up to 100 m
	Switch state	Up to 50 m
	Human	Up to 150 m
	Cars	Up to 250 m
	End of rail	Up to 80 m
<b>Standards</b>	Environmental operating conditions	Designed to meet EN 50155, EN 61373, EN 60529
	Safety Standard	Designed to meet EN 50126, EN 50657
	Fire Protection	Designed to meet EN 45545
	Electromagnetic compatibility	Designed to meet EN 50121
	10 ~ 95% RH, Non-condensing	

