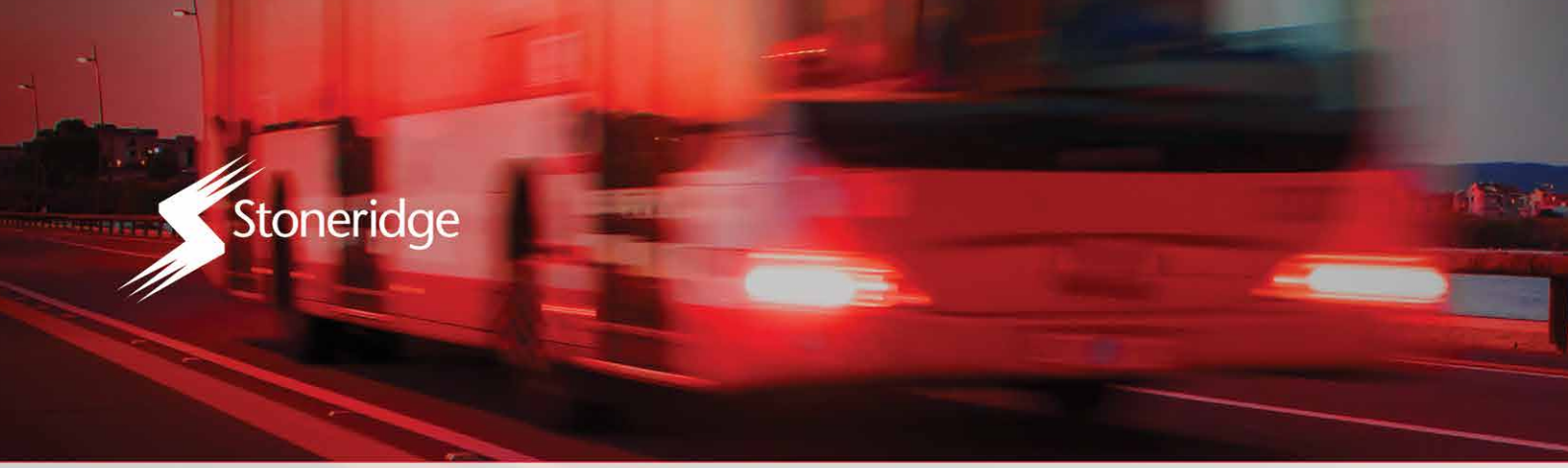
Stoneridge

MirrorEye®
Camera Monitor System for Buses



MirrorEye® Camera Monitor System for Buses

Delivering Improved Driver Vision and Blind Spot Elimination

Stoneridge-Orlaco's innovative MirrorEye Camera Monitor System (CMS) replaces the bus mirrors with integrated external digital cameras and monitors inside the cab of the bus. MirrorEye eliminates driver blind spots, provides a greater field of view and improves safety for everyone on the road irrespective of time of the day or weather conditions.

KEY VISION AND SAFETY FEATURES

- Greater field of view around the vehicle, including common blind spots
- Reduces drag coefficient, fuel consumption and related GHG emissions
- Superior views in inclement weather with heated and hydrophobic-coated lenses
- Distance markers for safer lane changes or pantograph alignment on electric busses
- High-definition, real-time images
- Color night vision with low-light sensitivity
- Compact design: camera wings extend just 4.5 inches from the bus body

FMCSA EXEMPTION

MirrorEye® is the first approved CMS authorized by the Federal Motor Carrier Safety Administration (FMCSA) in the United States. This allows MirrorEye® to serve as a viable alternative to the mandatory rear-vision mirrors found on buses and coaches.

MirrorEye® Camera Monitor System can be easily retrofitted in the field for fleet operators or seamlessly installed at the OEM level alongside conventional mirrors.

WATCH VIDEO

Discover the benefits of MirrorEye for your bus. Scan the QR-code and watch the video.

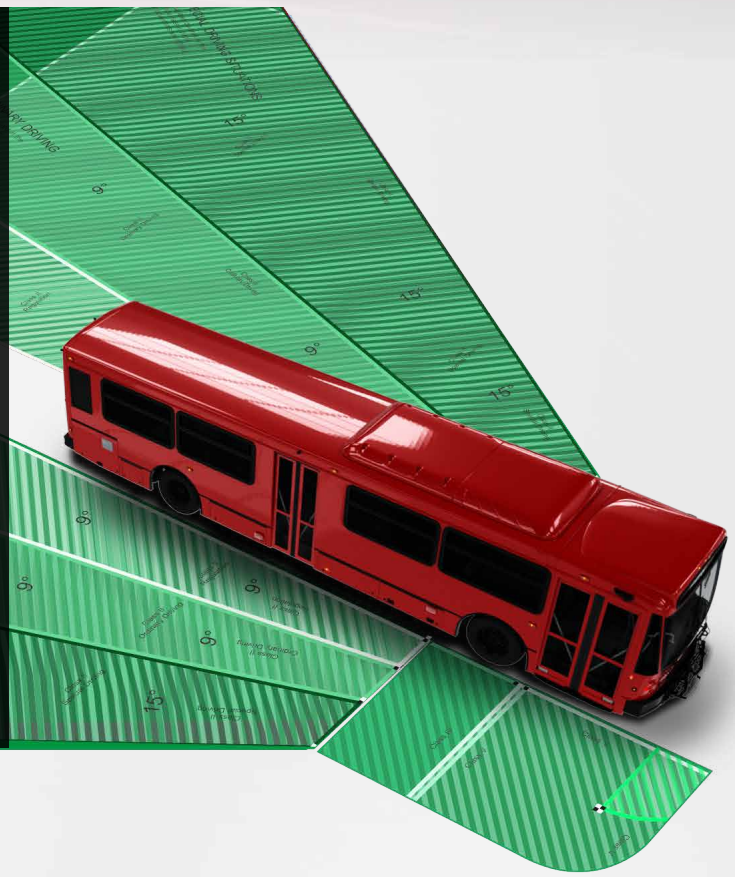
MirrorEye®

BETTER SAFETY THROUGH BETTER VISION™

ADVANCED VISION TECHNOLOGY ENSURES OPTIMAL, RELIABLE PERFORMANCE

The camera monitor system replaces traditional mirrors with high-definition (HD) cameras and interior monitors. Common blind spots are eliminated with robust and dependable camera which provides two fields of view: normal rearview (Class II) and wide angle views (Class IV). By integrating an additional passenger-side Class V camera in the same housing, potential turn collisions with other motorists, pedestrians, and physical obstacles such as extended mirros of other vehicles, light posts and curbs are prevented.

Enhance safety and efficiency with MirrorEye.
Scan the QR code and contact us to learn more.



BETTER SAFETY THROUGH BETTER VISION

The camera system pushes the limits of safety by covering a greater field of vision compared to the statutory mirror classes II and IV. MirrorEye significantly improves road safety by reducing blind spots, making the driver more aware of objects and Vulnerable Road Users (VRU) dangers around the vehicle, and providing enhanced vision in operating environments where it is difficult to see with traditional mirrors. With an excellent view on the road, bus drivers can drive in comfort and maneuver easily in all traffic situations.

AWARDS

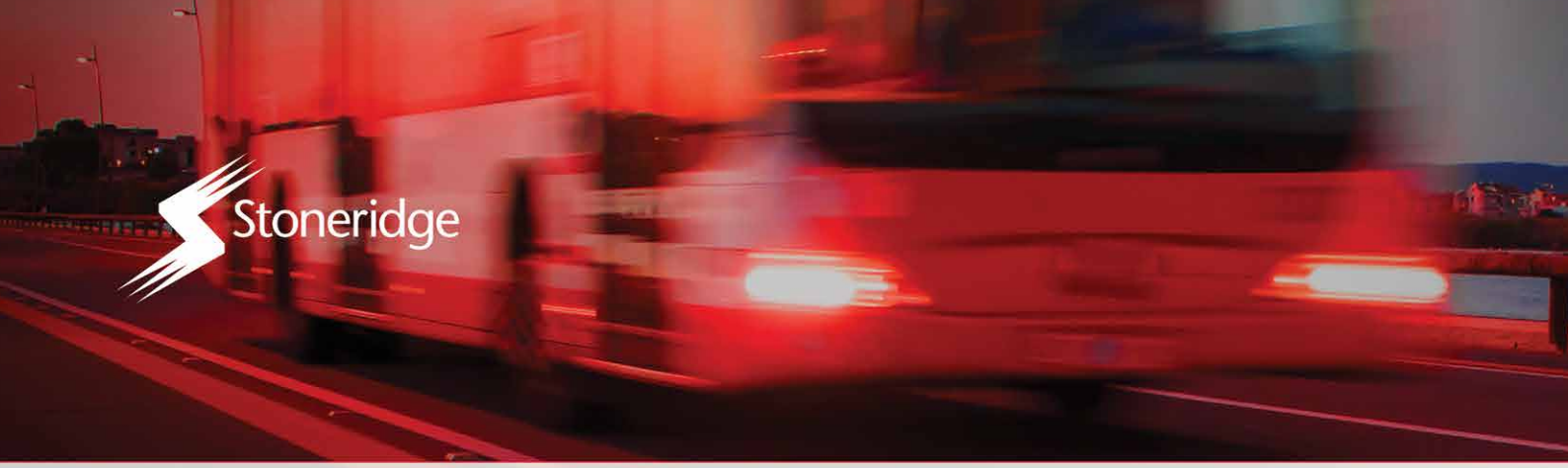
The award-winning MirrorEye Camera Monitor System outperforms traditional mirrors in every driving scenario.

INNOVATION LABEL busworld EUROPE AWARDS

Automotive News PACE AWARD Deloitte. APMA 2020 WINNER

HDT 20 TOP PRODUCTS 2022

2020 JIM WINSOR MEMORIAL TECHNICAL ACHIEVEMENT AWARD



AUGMENTED AND ENHANCED VISION QUALITY

Equipped with self-cleaning and defrosting functions, the system enhances vision quality during adverse weather conditions eliminates issues related to rain, snow and ice. An advanced image rendering system also blocks sunlight reflections, and superior infrared-enhanced color night vision improves the range of low-light performance ensuring optimal visibility at night. As a result, bus drivers have an optimal view of the surrounding night-time traffic compared to conventional mirrors. In addition, the system offer clear color vision, allowing for glare reduction, less eye strain and less fatigue for drivers.

Night

Rain, Fog & Dust

Sun

IMPROVED OPERATING EFFICIENCY

MirrorEye's compact design and positioning on the body prevents damage to the vehicle and on road objects. In addition, the aerodynamic camera wings of MirrorEye provides improved fuel efficiency. by two to three percent per year. All of this contributes to a substantial reduction in the total cost of ownership.

	Conventional Mirror	MirrorEye®
Co^2 Fuel Reduction	-	✓
Night mode	-	✓
Rain, Fog & Dust mode	-	✓
Solar mode	-	✓
Defrosting mode	-	✓

PROVEN TECHNOLOGY

More than 3.000 Commercial Vehicles have been retrofitted and running on MirrorEye system in the US and several commercial vehicle OEMs are prewiring the vehicles to offer flexibility to the customers for line fitment or retrofit.

In the European Union, several truck and bus manufacturers have adopted the MirrorEye camera monitor system. Buses equipped with MirrorEye can be found in several cities across Europe, including Spain (Barcelona, Madrid), the Netherlands (Amsterdam, Leiden, Den Bosch), United Kingdom (London, Belfast, Birmingham, Liverpool), Norway (Oslo), Germany (Berlin, Frankfurt, Bonn), Italy (Turin, Genoa, Milan) and France (Rouen, Bordeaux).

CONTACT US

Scan the QR-code and complete the form on our website to experience MirrorEye first-hand.

ECU MirrorEye Peregrine MP - Electronic Control Unit

	Description
Electrical	
Power input	9..32VDC
Video input	2x camera input from Camera wings.
Video output	2x display output to monitors for class II and IV.
Mechanical	
Housing	Aluminium.
Ingress Protection	IP31.
Weight	Approx. 1290 g/part.
Operating temperature	-40°C to +85°C.
Cutoff temperature	+85°C.

Camera MirrorEye MP

Description	Description **Camera MirrorEye Left** **Camera MirrorEye Right + S**	**Camera MirrorEye Right with additional camera**	**Camera MirrorEye Left + S with additional camera**
Camera module	One image sensor for Class II/IV view, 2.5MP.	One image sensor for Class II/IV view, 2.5MP. Additional camera.	
Night Vision	Day/Night tuning + IR LED.	Day/Night tuning + IR LED.	
Heating	Power defrost activated at XX°.	Power defrost activated at XX°.	
Ingress protection	IP69K for camera and IR module Vehicle cable entry can be sealed with grommet.	IP69K for camera and IR module Vehicle cable entry can be sealed with grommet.	
Weight	925 g/part.	1090 g/part.	
Operating temperature	-40°C...+85°C	-40°C...+85°C	
Power supply	Camera powered over coax from ECU. IR LED powered via power cable from ECU.	Camera powered over coax from ECU. IR LED powered via power cable from ECU. Additional camera via seperate connection.	

Monitor 12.3" and Monitor 15"

	Description
Description	12.3" Monitor unit, Driver/Passenger side
Backlight	TFT LED.
Display module	12.3" (diagonal size), 720 x 1223 pixels for Class II image, 720 x 617 pixels for IV image.
Frame rate	50Hz.
Operating temperature	-40°C - +85°C.
Power supply	Power over coax from ECU.

Additional Vision Solutions

Incorporate additional camera solutions into the MirrorEye system, expanding the range of driving assistance features to ensure an even more comfortable and secure journey. Stoneridge-Orlaco develops high-quality vision solutions that are specifically designed for various scenarios. By tailoring our solutions to meet specific needs, we strive to achieve the ultimate objective of enhancing safety, efficiency, and passenger comfort.

Contact our specialists on support.na@stoneridge.com for more information about Stoneridge-Orlaco's vision solutions or visit stoneridge-orlaco.com.

DoorView

FrontView

RearView

CornerEye®

SideEye™

Stoneridge

Stoneridge-Orlaco is part of Stoneridge Inc. (NYSE: SRI) and market leader in the field of camera monitor systems for commercial and industrial vehicles. For more than 30 years we have been designing, developing and producing professional and certified vision solutions to increase road safety, improve ergonomics, create more comfort for drivers and provide for greater efficiency. Our camera systems are extremely robust, shock and vibration-resistant and can be used in the harshest of conditions. As a result, we are the preferred vendor for leading vehicle manufacturers around the world.

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