Brigade

R159 Front Radar

Detection Systems

R159 compliant Front Radar

The General Safety Regulation (GSR) for trucks is a set of safety standards that applies to new trucks at an OEM level in the European Union (EU). The regulation sets out a range of requirements that aim to improve the safety of all vehicles on the road by mandating the use of advanced safety technologies.

Regulation 159 requires a Moving Off Information System (MOIS) to detect and inform the driver of the presence of pedestrians and cyclists in close-proximity to the front of the vehicle and, if necessary, warn the driver of a potential collision. The information system should minimise false alarms.

Specifically designed to meet the R159 requirement, Brigade's R159 Front Radar is an advanced dual-radar collision prediction system with a 180° detection angle to the front of the vehicle. The driver is alerted through visual and audible signalsif a vulnerable road user is detected in close proximity.

 Blind Spot Monitoring: Enhanced dual radar technology to detect pedestrians and cyclists in blind spots in front of the vehicle

- R159 Compliant: Ideal MOIS solution for R159 requirements
- Visual and Audible Alerts: 3-stage system to alert drivers through visual and audible signals if a vulnerable road user is detected in close proximity to the front of the vehicle when stationary as well as moving off
- Real-time Feedback: Providing real-time warnings to the drivers for immediate reaction to prevent collisions
- Plug and Play System: Only requires power from the vehicle

X1 In-cab display



x1 Dual-radar exterior unit



About us

Brigade Electronics is a market leader of safety devices, with solutions to suit all commercial vehicles and mobile plant. Our complementary range of safety devices help prevent collisions by assisting the driver whilst protecting workers, pedestrians and cyclists.

Front Radar Sensor System

R159 Front Radar sensor system, for front centre installation

Model Number: FR-001R159 | Part Number: 8064



Voltage 9-32Vdc



Detection Length 2.5m



Detection Width 3.6m



Sensor Size (WxHxD) 115 x 95 x 41mm



Sensor Size With Bracket (WxHxD) 200 x 110 x 43.5mm



Display Size With Bracket (WxHxD) 80 x 40 x 20mm



IP Rating IP69K Sensor



Warranty 3 years

Contents

- 1x dual radar sensor unit
- 1 x display & bracket
- 1 x radar bracket
- 1 x radar cable 5m
- 1 x IMU module & bracket

Features

- 180° detection angle
- Detects VRUs in the front blind spot when vehicle is stationary or moving off
- Detects static and moving objects
- 3-stage visual driver alert dependent on detection distance from vehicle

- Audible and visual driver alert when object is detected and vehicle is moving forward
- Designed for rigid and articulated vehicles
- System active under 5Km/h
- Quick and easy installation
- Compact and rugged design for harsh environments
- Operating frequency: 76-77GHz
- · Adjustable display volume
- Self-adjusting brightness display

Power

• Power consumption: 6.5 Watts

Durability & Standards

- Operating temperature: -40 to +85°C
- CE marked
- E-Marked: UNECE R10 compliant
- Meets 2024 PSS Direct Vision Standard MOIS requirements

Level 1 Warning



When stationary, a light is shown if there is a static or moving VRU in the middle detection zone.



When stationary, a light is shown in the relevant left or right zone if a moving VRU is detected.

Level 2 Warning



If a VRU is detected in any zone when the vehicle begins to move off, the display will alert the driver with a red light and acoustic alarm.



Visit our website **brigade-electronics.com** or scan the QR code for more information, individual specifications and to view our full range of safety solutions.

