

# NEXT-GENERATION DRIVER FATIGUE AND DISTRACTION SOLUTION FOR FLEETS

## GUARDIAN BY SEEING MACHINES

**GUARDIAN OFFERS FLEETS A REAL-TIME, PROACTIVE DRIVER SAFETY SOLUTION BOASTING UNPARALLELED DROWSINESS AND DISTRACTION DETECTION AND SUPERIOR FATIGUE INTERVENTION.**



- **Early drowsiness detection:** Guardian continuously monitors and evaluates a driver's level of drowsiness, intervening in real time if they are at risk. By intervening pre-emptively, drivers can take action before they tire further and potentially have a microsleep.
- **Advanced distraction detection:** Guardian meticulously tracks a driver's eyes to provide highly accurate distraction analysis, including continuous and short off-road glances (commonly seen with mobile phone use, for example).
- **Real-time intervention:** When Guardian detects fatigue or distraction, it intervenes in real time through a set of audio, visual and vibration alerts. Instant feedback encourages drivers to avoid risky behaviours and allows them to recognise and develop strategies to mitigate these risks.

### Human Factors meets Human Intervention

Seeing Machines' algorithms are underpinned by more than 20 years of Human Factors research and development, and over 19 billion kilometres of real-world driving data. Guardian combines these world-class algorithms with precision optics to deliver premium tracking performance in the most demanding real-world driving conditions, for example, in different types of lighting and when drivers are wearing glasses, sunglasses or even face masks.

What makes the Guardian solution truly unique is combining Seeing Machines' industry-leading in-vehicle safety technology with 24/7 monitoring and analysis by real humans, who contact fleets within minutes of a confirmed fatigue event so they can intervene when it matters the most.

In fact, the human intervention aspect of Guardian is scientifically proven to increase the reduction of fatigue-related driving events from around 60% to more than 90%.

That's the difference that truly saves lives.

### GUARDIAN IS...



#### Automotive-grade:

powered by technology that is used by leading brands, in over 2.88 million vehicles worldwide.



#### Proven:

scientifically proven to reduce fatigue-related driving events by over 90%.



#### Trusted:

implemented by 1,100+ commercial transport and logistics organisations globally.



seeingmachines

**GUARDIAN**

[seeingmachines.com/fleet](https://seeingmachines.com/fleet)



In-cab sensor



Vibration motor (optional)

Guardian is a comprehensive safety solution that uses computer vision and machine learning to interpret detailed facial information and mitigate the risks associated with drowsy and distracted driving.

## THE GUARDIAN SOLUTION

**In-vehicle system:** Hardware mounted in the vehicle, using advanced algorithms to trigger configurable in-cabin alerts when driver fatigue or distraction is detected.

**Guardian Centre:** 24/7 monitoring centre, where human analysts review and classify every single risky driving incident captured by Guardian.

**Guardian Live:** A secure web application providing a comprehensive, near real-time view of data generated by the Guardian units installed in customer vehicles, along with regular reports.

**Technical support:** 24/7 access to Seeing Machines technical support specialists and the Guardian Support Portal for authorised customer personnel.

## HOW GUARDIAN WORKS



Guardian monitors a driver for signs of drowsiness, microsleep or distraction



When detected, in-cab audio, visual and/or haptic alerts\* are activated to warn the driver



24/7 analysts review and confirm the event, notifying the company as needed



Company determines the best course of action, including real-time intervention



Data insights can inform safety programs and support operational improvements