

## Press release

CES 2026

### **In darkness and fog: AUMOVIO cameras provide clearer vision and enhanced safety in poor visibility**

- **AI-powered camera system improves driving in all lighting conditions**
- **Optimized hardware for good visibility in challenging weather conditions complements night vision system**
- **Camera technology uses infrared light for better image data**
- **AUMOVIO is among the leaders in robust, high-performance automotive cameras**

Frankfurt, Germany, December 2, 2025. With the onset of the cold season come fog, snow and rain. For drivers, this often means poor visibility and added stress behind the steering wheel. At the same time, central control units are dependent on accurate environmental data. Technology and electronics company AUMOVIO is now delivering better visibility in adverse conditions – especially fog, rain and darkness. At the Consumer Electronics Show (CES) in Las Vegas in January, the company will present a new camera system that uses artificial intelligence to take usable image information in challenging light conditions to a new level in the automotive sector. Whether driving at night, navigating through spray on wet roads or reversing in a downpour, an all-weather camera ensures particularly sharp images and provides the vehicle's on-board system with detailed data – helping drivers maneuver safely not only through fall and winter but all year round.

#### **Cameras key to safe and intelligent mobility**

Demand for high-performance cameras is growing, driven in part by international institutions such as Euro NCAP, which increasingly emphasize driver assistance systems in new vehicles. These systems depend on sensors like cameras and radar to accurately detect and interpret traffic situations.

Cameras, in particular, are essential for precise environmental recognition and for visualizing the vehicle's surroundings in the cockpit – for example, during reverse parking. AUMOVIO's new camera system delivers crystal-clear images even in rain or darkness, displaying the entire area around the vehicle on the cockpit display. The company is among the leaders in developing highly efficient camera systems for automotive applications.

“Reliable, high-resolution image data is a prerequisite for safe mobility, especially as assisted and automated driving functions become more prevalent,” says Thomas Petzold, head of the camera and ultrasonic sensor product line in AUMOVIO's Autonomous Mobility business area. “AUMOVIO is a leader in robust, high-performance sensor systems. Our innovative AI-supported camera represents a true technological leap in detecting and visualizing traffic situations under adverse weather conditions.”

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### **Sharp images in darkness thanks to artificial intelligence**

With its night vision functionality, the new camera system is a customer-focused evolution of AUMOVIO's high-performance cameras designed for difficult light and weather conditions. Developers leveraged the company's extensive expertise in custom sensor systems, incorporating proven hardware components renowned for durability and reliability – critical advantages for demanding automotive environments.

The proven and modular camera portfolio, which allows easy integration of components such as lenses, image sensors, connectors, data transmission, and chip has now been enhanced with AI software. The AI is used on a central control unit for image processing. The camera algorithm optimizes contrasts and provides significantly more accurate data based on the camera images than is the case with conventional systems. Due to road traffic regulations, the area to the right and left of the vehicle must not be illuminated with visible light, but thanks to the algorithm-based integrated contrast enhancement, this area can now be captured a lot better. The camera system only illuminates the critical zones virtually for data acquisition by the central control unit, not in the real vehicle environment. This allows early detection of pedestrians or wildlife at the edge of dark roads, for example.

### **Seeing what other cameras miss – better visibility even in fog under development**

To ensure clear vision in especially challenging weather conditions such as thick fog, heavy rain, spray, or snow, AUMOVIO is working on a particularly effective all-weather camera variant. Equipped with a specialized infrared filter, it can accurately detect objects and traffic situations up to 160 meters ahead.

In principle, all cameras in a vehicle are equipped with infrared filters because light waves in the infrared spectrum could interfere with the color representation of a camera. AUMOVIO's innovation involves selectively opening a small section of the filter to allow a defined infrared wavelength range – improving image clarity even further. The aim is to enable better visibility and thus greater safety in the future, even in foggy conditions. This is achieved by means of high-resolution images from the camera.

However, the more pixels there are, the greater the amount of data. For most applications, AUMOVIO relies on camera systems with a maximum of eight megapixels, and for special applications up to 18 megapixels, in order not to overload the onboard computing capacity. A combination of high resolution, a modular design, the use of infrared wavelengths, and intelligent software for contrast enhancement make up the AUMOVIO camera portfolio.

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Since its spin-off in September 2025, AUMOVIO continues the business of the former Continental group sector Automotive as an independent company. The technology and electronics company offers a wide-ranging portfolio that makes mobility safe, exciting, connected, and autonomous. This includes sensor solutions, displays, braking, and comfort systems, as well as comprehensive expertise in software, architecture platforms, and assistance systems for software-defined vehicles. In the fiscal year 2024, the business areas, which now belong to AUMOVIO, generated sales of 19.6 billion Euro. The company is headquartered in Frankfurt, Germany and has over 86,000 employees in more than 100 locations worldwide.

### Images and captions



AUMOVIO\_PP\_Night\_Vision

Night vision camera systems provide superior visibility in low-light conditions compared with conventional cameras.



AUMOVIO\_PP\_Field\_of\_View

Integrated vehicle cameras with different fields of view and ranges accurately detect the surroundings – a key technology for assisted and automated driving.