IAA MOBILITY 2025

AI-supported camera for improved night vision

Munich, Germany, September 2025. The precise capture of the vehicle’s surroundings, especially the road ahead, is a fundamental requirement for the development of advanced driver assistance functions as well as for automated and autonomous driving. At IAA, AUMOVIO presents a new night vision camera that significantly improves image quality and thereby vision in the dark, thanks to the support of an AI resolution specially developed in-house.

Camera setups in both current and future vehicle platforms are enhanced by software for visualization and driving experience. At the core is an AI-based image enhancement system for low-light scenarios, designed to support human vision and perception tasks while addressing the limitations of existing approaches by leveraging a vast parameter space. The solution integrates seamlessly with any customer camera setup to deliver an excellent vision experience in low light.

The night-capable camera systems offer multiple use cases, making them for example ideal for upcoming NCAP requirements, parking functions, assisted driving, and automated driving. Use cases include the detection of vulnerable road users in low-light conditions and adverse weather conditions such as fog, lost-cargo detection up to 160 meters in low light, and animal detection. The camera systems also enhance parking scenarios by better park marking detection.

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| AUMOVIO\_PP\_Night\_Vision | Night-capable camera systems substantially improve image visibility and quality at night. |