# Press Release

**Ready for AI: powerful, freely programmable smart cameras with *NVIDIA Jetson* modules**

(06/29/2021) Baumer presents the AX smart cameras, its first industrial-grade smart cameras that combine the market-leading *NVIDIA Jetson* modules with powerful *Sony* CMOS sensors to create a compact, flexible, and freely programmable image processing platform for AI applications. As a result, a separate PC is no longer needed for image processing, saving space and costs while simplifying system design and integration. This mainly benefits applications in the area of quality inspection and process monitoring where large amounts of data must be processed within very short time periods for vision-at-the-edge computing. Thanks to the *NVIDIA Jetson* Nano or Xavier NX modules with special AI cores and graphic processors that are used, there are no limits to the flexible implementation of AI-based systems.

The AX smart cameras rely on the latest *Sony* CMOS sensors with 3.2 or 5 megapixel resolution to capture up to 77 frames/s of fast processes with high image quality and sensitivity as well as low noise. *Linux-*based, they support the respective application requirements of any programming language and allow the use of different image processing libraries and application programming interfaces (APIs). The compatibility with *GenICam* as well as M12-Ethernet and RS232 connections ensure easy, reliable, and efficient integration. To make the entire computing power available to image processing algorithms, FPGA-based features such as auto exposure and auto white balance automatically provide the best image quality for the respective application. With four opto-decoupled power outputs and an output performance of up to 120 W (max. 48 V/2.5 A), external illumination can be directly and cost-effectively controlled without external controllers. The optional patented tube system, quickly and reliably protects cameras and lenses even in rough environments up to IP 67 protection. Short exposure times from 1 µs also allow the precise detection of very fast movements.

Learn more at: <https://www.baumer.com/smart-cameras>

Photo: The new AX smart cameras from Baumer with *NVIDIA Jetson* modules are freely programmable for powerful AI applications.

Number of characters (with spaces): approx. 2100

Text and picture download at: [**www.baumer.com/press**](http://www.baumer.com/press)

**Baumer Group**

The Baumer Group is one of the worldwide leading manufacturers of sensors, encoders, measuring instruments and components for automated image processing. Baumer combines innovative technologies and customer-oriented service into intelligent solutions for factory and process automation and offers an unrivalled wide technology and product portfolio. With around 2,700 employees and 39 subsidiaries in 19 countries, the family-owned group of companies is always close to the customer. Baumer provides clients in most diverse industries with vital benefits and measurable added value by worldwide consistent high quality standards and outstanding innovative potential. Learn more at [www.baumer.com](http://www.baumer.com) on the internet.

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