



NVIDIA

NVIDIA® Jetson Orin™ inside

// ALECS - OPEN SMART CAMERA

The all-in-one machine vision solution

The Power of Possibility

With Alecs, Allied Vision moves beyond providing just components to offering integrated solution platforms. Unlike conventional "closed" smart cameras that come with pre-installed software for specific applications, Alecs represents Allied Vision's entry into the open smart camera market - a powerful hardware platform with a comprehensive Board-Support-Package (BSP) that you can customize with your own software. Alecs provides the advanced hardware and Linux-based foundation, giving you complete freedom to develop and deploy your own applications. You transform Alecs into a tailored "Closed Smart Camera" once you add your specialized software.


Alecs combines the feature rich Alvium camera platform with the powerful NVIDIA® Jetson Orin™ NX 16GB System on Module (SoM) and a robust IP67 housing. Compatible with the Open eVision Image analysis libraries from Euresys it has everything to process your image data on Alecs directly. With Alvium camera at its core, Alecs offers a wide range of integrated sensors and a comprehensive feature set for image processing. Whether object detection, tracking, classification, or other complex computer vision tasks, Alecs is the ideal choice for your custom software solution, offering sufficient power to support demanding AI algorithms.

Specifications

Camera model	Sensor	Mega-pixels	Resolution	Sensor format	Shutter mode	Max. frame rate in fps	Chroma
LXB-G1-510m-VIS-NX16-C-LT4649	Sony IMX548 CMOS	5	2464 × 2064 px	Type 1/1.8	Global	81	Mono
LXB-G1-510c-VIS-NX16-C-LT4649	Sony IMX548 CMOS	5	2464 × 2064 px	Type 1/1.8	Global	81	Color
LXB-G1-1242m-VIS-NX16-C-LT4670	Sony IMX545 CMOS	12	4128 × 3008 px	Type 1/1.1	Global	40	Mono
LXB-G1-1242c-VIS-NX16-C-LT4670	Sony IMX545 CMOS	12	4128 × 3008 px	Type 1/1.1	Global	40	Color

Processor System	NVIDIA Jetson Orin NX, 16 GB 128-bit LPDDR5 / 128 GB NVMe
Lighting	Ring light optional, external light optional connected via separate lighting connector
I/O	2 x opto isolated inputs, 2 x opto isolated outputs 1 x RS485 interface, 1 x Trigger-In, 1 x Strobe-Out
LAN	1 x IEEE 802.3 1000BASE-T
Power supply	24 V DC ±10%, typical 20 W (no lighting connected)
Dimensions LxWxH in mm	49.3 × 72 × 111.75 (main housing without lens cover)
Operating temperature	-20 °C to +65 °C (housing)
Type of protection	IP67 (with mounted lens tube and cables connected properly)

Ready for


Open eVision
Image Analysis Software Tools

Available Accessories

// Lens tubes in two sizes

// Lenses with focal lengths 6 mm to 35 mm

// Cables with different lengths

// Ring light and mounting plate