

// ALECS - OPEN SMART CAMERA

The all-in-one Machine Vision Solution



NVIDIA® Jetson Orin™ inside



eVision
Image Analysis Software Tools

New: **SWIR** 
Sensors available



The Power of Possibility

Unlike conventional "closed" smart cameras that come with pre-installed software for specific applications, Alecs is a powerful hardware platform with a comprehensive Board-Support-Package (BSP) that you can customize with your own or any standard Machine Vision software. Alecs provides the advanced hardware and Linux-based foundation, giving you complete freedom to develop and deploy your own applications. Compatible with the eVision Image analysis libraries, it has everything to process your image data on Alecs directly. 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.

Key Facts

// Powerful Alviium Camera inside
with large feature set and wide choice of sensors

// Power Modes up to 25W usable
due to heat dissipation design

// NVIDIA® Jetson™ Orin NX 16GB/Nano 8GB

// Industrial housing: IP67 ingress protection,
vibration and shock robustness (IEC 60068-2)

// Wide operating temperature range:
from -20°C to +65°C (housing)

// SWIR - Short-Wave-Infrared cameras available

Camera model	NVIDIA Jetson SoM	Sensor	Mega-pixels	Shutter mode	Max. frame rate in fps	Chroma
Alecs G1-510 NX16	NVIDIA Jetson Orin NX 16GB	Sony IMX548 CMOS	5	Global	81	m/c
Alecs G1-1242 NX16	NVIDIA Jetson Orin NX 16GB	Sony IMX545 CMOS	12	Global	40	m/c
Alecs G1-510 NA8	NVIDIA Jetson Orin Nano 8GB	Sony IMX548 CMOS	5	Global	81	m/c
Alecs G1-1242 NA8	NVIDIA Jetson Orin Nano 8GB	Sony IMX545 CMOS	12	Global	40	m/c
Alecs G1-030 VSWIR	NVIDIA Jetson Orin NX 16GB	Sony IMX991 CMOS	0.3	Global	249	m
Alecs G1-130 VSWIR	NVIDIA Jetson Orin NX 16GB	Sony IMX990 CMOS	1.3	Global	130	m
Alecs G1-320 VSWIR	NVIDIA Jetson Orin NX 16GB	Sony IMX993 CMOS	3.2	Global	130	m
Alecs G1-530 VSWIR	NVIDIA Jetson Orin NX 16GB	Sony IMX992 CMOS	5.3	Global	84	m

Processor System	NVIDIA Jetson Orin NX 16GB, 128-bit LPDDR5 / 128 GB NVMe NVIDIA Jetson Orin Nano 8GB, 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	49.30 × 72.00 × 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



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



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