

# Alvium G1

## Alvium G1-2040



Alvium G1-2040 innovative GigE camera with Sony IMX541 CMOS global shutter sensor provides industrial performance for cost effective machine vision applications.

### General

Model:	Alvium G1-2040
Product series:	Alvium G1
Status:	Available

### Sensor

Sensor type:	Area scan
Chroma:	Mono or Color
Spectrum:	Visible
Spectral range:	300 nm to 1100 nm
Resolution:	4,512 × 4,512 (20.40 MP)
Sensor model:	Sony IMX541
Sensor architecture (material):	CMOS
Shutter type(s):	Global Shutter
Sensor size:	17.6 mm ø (Type 1.1)
Pixel size:	2.74 µm × 2.74 µm

### Pixel formats

Sensor bit depth:	12-bit
Monochrome pixel formats:	Mono8, Mono10, Mono10p, Mono12, Mono12p, Mono12Packed
YUV pixel formats:	YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr
RGB pixel formats:	RGB8 (default), BGR8

## Pixel formats

Bayer pixel formats: BayerRG8, BayerRG10, BayerRG10p, BayerRG12, BayerRG12p, BayerRG12Packed

## Imaging performance

Quantum efficiency @ 529 nm: 68 %

## Timing and gain

Max. frame rate: 5 fps

## I/Os and power

Non-isolated lines: 2 GPIOs (LVTTTL)

Opto-isolated lines: 1 input, 1 output

Power supply: 10.8 to 26.4 VDC AUX | IEEE 802.3af, Power Class 0 PoE

Power consumption: External power: 3.8 W at 12 VDC (typical) | Power over Ethernet: 4.2 (typical)

## Operating conditions

Operating temperature (housing): -20 °C to 65 °C (housing)

## Mechanical properties

Body dimensions (L x W x H in mm): 41 × 29 × 29

Lens mount(s): C-Mount, CS-Mount

Weight: 70 g

## On-board memory and FPGA

Image buffer (RAM): 32 MByte

Non-volatile memory (Flash): 1024 KByte

## Interfaces

Digital interface: IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE)

# Quantum Efficiency



# Technical Drawing

