



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

Imaging performance

Quantum efficiency @ 529 nm	68 %
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Timing and gain

Max. frame rate	5 fps
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I/Os and power

Non-isolated lines	2 GPIOs (LVTTL)
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Opto-isolated lines	1 input, 1 output
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Power supply	10.8 to 26.4 VDC AUX IEEE 802.3af, Power Class 0 PoE
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Power consumption	External power: 3.8 W at 12 VDC (typical) Power over Ethernet: 4.2 (typical)
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Operating conditions

Operating temperature (housing)	-20 °C to 65 °C ((housing))
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Mechanical properties

Body dimensions (L x W x H in mm)	41 × 29 × 29
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Lens mount(s)	C-Mount, CS-Mount
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Weight	70 g
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On-board memory and FPGA

Image buffer (RAM)	32 MByte
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Non-volatile memory (Flash)	1024 KByte
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Interfaces

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



Technical Drawing

