



Alvium G1

Alvium G1-500

Alvium G1-500 innovative GigE camera with ON Semi AR0521 CMOS rolling shutter sensor provides industrial performance for cost effective machine vision applications.

General

Model	Alvium G1-500
Product series	Alvium G1
Status	Available

Sensor

Sensor type	Area scan
Chroma	Color, Mono
Spectrum	Visible
Spectral range	300 nm to 1100 nm
Resolution	2,592 × 1,944 (5.00 MP)
Sensor model	ON Semi AR0521SR
Sensor architecture (material)	cmos
Shutter type(s)	Rolling shutter (RS)
Sensor size	5.7 × 4.3 mm (7.1 mm, Type 1/2.5)
Pixel size	2.20 µm × 2.20 µm

Pixel formats

Sensor bit depth	10-bit
YUV pixel formats	YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr
RGB pixel formats	BGR8, RGB8 (default)
Bayer pixel formats	BayerGR10, BayerGR10p, BayerGR12, BayerGR12p, BayerGR12Packed, BayerGR8

Imaging performance

Quantum efficiency @ 529 nm	79 %
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Timing and gain

Max. frame rate	23 fps
Exposure time	8 μ s to 480.00 ms
Gain	0.0 dB to 24.1 dB

I/Os and power

Non-isolated lines	2 GPIOs (LVTTL)
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: 2.9 W at 12 VDC (typical) Power over Ethernet: 3.2 W (typical)

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
Lens mount(s)	C-Mount, CS-Mount, S-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)
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Quantum Efficiency



Technical Drawing

