

Alvium G5

Alvium G5-291



Alvium G5-291 innovative 5GBASE-T camera with Sony IMX421 CMOS global shutter sensor provides industrial performance for cost effective embedded and machine vision applications.

General

Model:	Alvium G5-291
Product series:	Alvium G5
Status:	Available

Sensor

Sensor type:	Area scan
Chroma:	Mono or Color
Spectrum:	Visible
Spectral range:	300 nm to 1100 nm
Resolution:	1,944 × 1,472 (2.90 MP)
Sensor model:	Sony IMX421
Sensor architecture (material):	CMOS
Shutter type(s):	Global Shutter
Sensor size:	12.75 mm \varnothing (Type 2/3)
Pixel size:	4.50 μm × 4.50 μm

Pixel formats

Sensor bit depth:	8-bit, 10-bit, 12-bit; Adaptive (10-bit, 12-bit)
Monochrome pixel formats:	Mono8, Mono10, Mono10p, Mono12, Mono12p, Mono12Packed
YUV pixel formats:	YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr

Pixel formats

RGB pixel formats:	RGB8 (default), BGR8
Bayer pixel formats:	BayerRG8, BayerRG10, BayerRG10p, BayerRG12, BayerRG12p, BayerRG12Packed

Imaging performance

Quantum efficiency @ 529 nm:	73 %
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Timing and gain

Max. frame rate:	166 fps
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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: 6.6 W at 12 VDC (typical) Power over Ethernet: 7.2 W (typical)

Operating conditions

Operating temperature (housing):	-20 °C to 60 °C housing temperature
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Mechanical properties

Body dimensions (L x W x H in mm):	60 × 29 × 29
Lens mount(s):	C-Mount, CS-Mount
Weight:	100 g

On-board memory and FPGA

Image buffer (RAM):	512 MByte
Non-volatile memory (Flash):	1024 KByte

Interfaces

Digital interface:	IEEE 802.3: 5GBASE-T or 2.5GBASE-T (NBASE-T) and 1000BASE-T, IEEE 802.3af Power Class 0 PoE
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Quantum Efficiency



