



## Alvium G1

### Alvium G1-1236

Alvium G1-1236 innovative GigE camera with Sony IMX304 CMOS global shutter sensor provides industrial performance for cost effective embedded and machine vision applications.

#### General

|                |                |
|----------------|----------------|
| Model          | Alvium G1-1236 |
| Product series | Alvium G1      |
| Status         | Available      |

#### Sensor

|                                |                                    |
|--------------------------------|------------------------------------|
| Sensor type                    | Area scan                          |
| Chroma                         | Color, Mono                        |
| Spectrum                       | Visible                            |
| Spectral range                 | 300 nm to 1100 nm                  |
| Resolution                     | 4,112 × 3,008 (12.40 MP)           |
| Sensor model                   | Sony IMX304                        |
| Sensor architecture (material) | cmos                               |
| Shutter type(s)                | Global shutter (GS)                |
| Sensor size                    | 14.2 × 10.4 mm (17.6 mm, Type 1.1) |
| Pixel size                     | 3.45 µm × 3.45 µm                  |

#### Pixel formats

|                     |                                                      |
|---------------------|------------------------------------------------------|
| Sensor bit depth    | 12-bit                                               |
| YUV pixel formats   | YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr |
| RGB pixel formats   | BGR8, RGB8 (default)                                 |
| Bayer pixel formats | BayerRG12                                            |

#### Imaging performance

|                             |      |
|-----------------------------|------|
| Quantum efficiency @ 529 nm | 64 % |
|-----------------------------|------|

## Timing and gain

|                 |                    |
|-----------------|--------------------|
| Max. frame rate | 9 fps              |
| Exposure time   | 48 $\mu$ s to 10 s |
| Gain            | 0.0 dB to 48.0 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: 3.8 W at 12 VDC (typical)   Power over Ethernet: 4.0 W (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              |

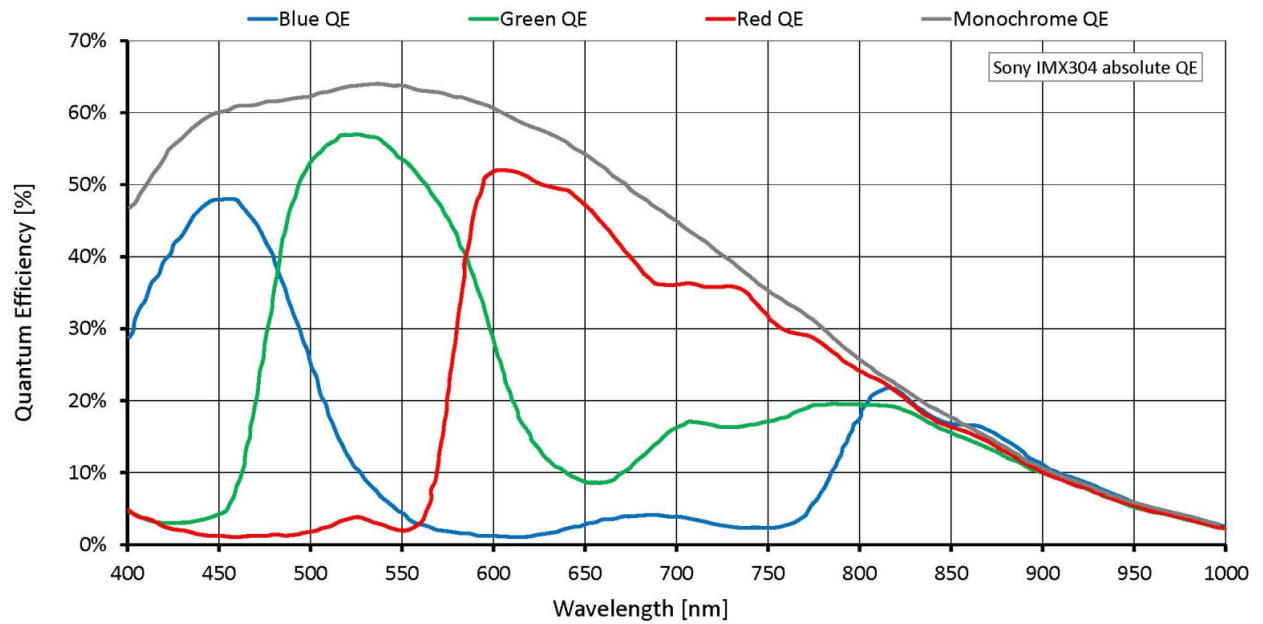
## On-board memory and FPGA

|                             |            |
|-----------------------------|------------|
| 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

