

Alvium

G1-130 VSWIR



- IMX990 InGaAs sensor
- ALVIUM image processing
- GigE Vision
- 3 lens mount options

Model without hardware options

Alvium G1 – Reliability designed for the future

Compact GigE camera for constant image quality

Alvium G1-130 VSWIR with Sony IMX990 | InGaAs runs 86.0 frames per second at 1.3 MP resolution.

Alvium G1 is the first GigE Vision camera powered by ALVIUM® Technology, Allied Vision's ASIC chip. It combines the advantages of the established GigE Vision standard with the flexibility of the Alvium platform. In addition to a comprehensive feature set and a broad sensor selection, it offers great versatility. With its very compact housing and industrial standard hardware, it can easily be integrated into any vision system while ensuring long-term availability and reliability.

Easy software integration with **Vimba X** and compatibility to the most popular third party image-processing libraries.

Specifications

| | |
|------------------------------------|---|
| Interface | IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) |
| Resolution | 1296 (H) × 1032 (V) |
| Spectral range | 400 to 1700 nm |
| Sensor | Sony IMX990 InGaAs |
| Sensor type | InGaAs |
| Shutter mode | GS (Global shutter) |
| Sensor size | Type 1/2 VSWIR |
| Pixel size | 5 µm × 5 µm |
| Lens mounts (available) | C-Mount, CS-Mount |
| Max. frame rate at full resolution | 86 fps at 122 MByte/s, Mono8 |
| ADC | 12 Bit |
| Image buffer (RAM) | 32 MByte |
| Non-volatile memory (Flash) | 1024 KByte |

Output

| | |
|--------------------------|---|
| Bit depth | 8-bit, 10-bit, 12-bit; Adaptive (10-bit, 12-bit) |
| Monochrome pixel formats | Mono8 (default), Mono10, Mono10p, Mono12, Mono12p, Mono12Packed |

General purpose inputs/outputs (GPIOs)

| | |
|--------------------|-------------------|
| TTL I/Os | 2 GPIOs (LVTTTL) |
| Opto-isolated I/Os | 1 input, 1 output |

Operating conditions/dimensions

| | |
|-----------------------------------|--|
| Operating temperature | +5 °C to 65 °C (housing) |
| Power requirements (DC) | 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) |
| Mass | 70 g |
| Body dimensions (L × W × H in mm) | 41 × 29 × 29 |

Quantum efficiency



Features

Image control: Auto

- Auto exposure
- Auto gain

Image control: Other

- Adaptive noise correction
- Binning
- Black level
- Contrast
- Custom convolution
- DPC (defect pixel correction)
- Gamma
- LUT (look-up table)
- Reverse X/Y
- ROI (region of interest)
- Sharpness/Blur

Camera control

- Acquisition frame rate
- Bandwidth control
- Counters and timers
- Firmware update in the field
- I/O and trigger control
- Readout modes (SensorBitDepth)
- Sequencer
- Serial I/Os
- Temperature monitoring
- User sets

Technical drawing

