



- IMX548 CMOS sensor
- GigE Vision
- High bandwidths
- 3 lens mount options

Model without hardware options

Alvium G1 – Reliability designed for the future

Compact 1GigE camera for constant image quality

Alvium G1-510 with Sony IMX548 runs 0.0 frames per second at 5.1 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 the latest Global Shutter Sony IMX sensors, it offers a highly attractive price-performance ratio. With its compact housing, it can easily be integrated into any vision systems.

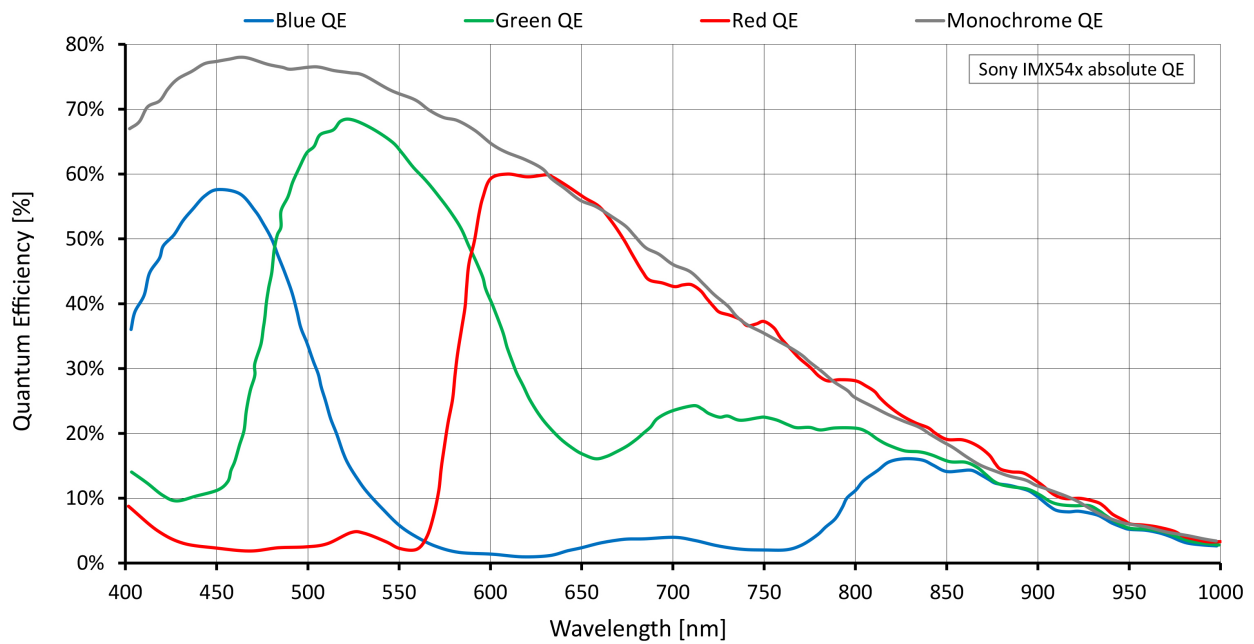
Easy software integration with Allied Vision's **Vimba Suite** and compatibility to the most popular **third party image-processing libraries**.

Specifications

| Alvium G1-510 | |
|----------------|---|
| Interface | IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) |
| Resolution | 2464 (H) × 2064 (V) |
| Spectral range | 300 to 1100 nm |
| Sensor | Sony IMX548 |
| Sensor type | CMOS |
| Shutter mode | Global shutter |

| Alvium G1-510 | |
|---|---|
| Sensor size | Type 1/1.8 |
| Pixel size | 2.74 μm \times 2.74 μm |
| Lens mounts (available) | C-Mount, CS-Mount, S-Mount |
| Max. frame rate at full resolution | Tbd fps at tbd MByte/s, Mono8 |
| ADC | 12 Bit |
| Image buffer (RAM) | 32 MByte |
| Non-volatile memory (Flash) | 1024 KByte |
| Output | |
| Bit depth | Max. 12 Bit |
| Monochrome pixel formats | Mono8, Mono10, Mono10p, Mono12, Mono12p |
| YUV color pixel formats | YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr |
| RGB color pixel formats | BayerRG8, BayerRG10, BayerRG10p, BayerRG12, BayerRG12p, BGR8, RGB8 (default) |
| General purpose inputs/outputs (GPIOs) | |
| TTL I/Os | 2 GPIOs (LVTTL) |
| Opto-isolated I/Os | 1 input, 1 output |
| Operating conditions/dimensions | |
| Operating temperature | -20 °C to tbd °C housing temperature |
| Power requirements (DC) | 10.8 to 26.4 VDC AUX IEEE 802.3af, Power Class 0 PoE |
| Power consumption | External power: Tbd W at 12 VDC (typical) Power over Ethernet: Tbd W (typical) |
| Mass | 62 g |
| Body dimensions (L \times W \times H in mm) | 41 \times 29 \times 29 |
| Regulations | CE: 2014/30/EU (EMC), 2011/65/EU, including amendment 2015/863/EU (RoHS); FCC Class B; CAN ICES-3 (B) |

Quantum efficiency



Features

Image control: Auto

- Auto exposure
- Auto gain
- Auto white balance (color models)

Image control: Other

- Adaptive noise correction
- Binning
- Black level
- Color transformation (incl. hue, saturation; color models)
- Contrast
- Custom convolution
- De-Bayering up to 5×5 (color models)

- DPC* (defect pixel correction)
- FPNC* (fixed pattern noise correction)
- Gamma
- LUT (look-up table)
- Reverse X/Y
- ROI (region of interest)
- Sharpness/Blur

*The early production cameras do not support DPC and FPNC. Support will be available with future series models.

Camera control

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

Technical drawing

