# Alvium
## G5-811

- IMX546 CMOS sensor
- GigE Vision
- High bandwidths
- 2 lens mount options

Model without hardware options

**Alvium G5 - 5GigE Vision camera for demanding applications**

## Speed up your vision application

Alvium G5-811 with Sony IMX546 runs 59.0 frames per second at 8.1 MP resolution.

The Alvium G5 camera series combines the advantages of the 5GigE interface for higher bandwidth and the flexibility of the Alvium platform offering various mount and sensor options. It enables an easy upgrade of existing systems (USB3 Vision or GigE Vision) and offers backwards compatibility with 1000BASE-T solutions. Powered by ALVIUM® Technology, the sugar cube Alvium G5 camera delivers highest image quality at a low power consumption.

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

Allied Vision

# Specifications

| | |
|---|---|
| Interface | IEEE 802.3 5GBASE-T, 1000BASE-T, IEEE 802.3af Power Class 0 PoE |
| Resolution | 2848 (H) × 2848 (V) |
| Spectral range | 300 to 1100 nm |
| Sensor | Sony IMX546 |
| Sensor type | CMOS |
| Shutter mode | Global shutter |
| Sensor size | Type 2/3 |
| Pixel size | 2.74 µm × 2.74 µm |
| Lens mounts (available) | C-Mount, CS-Mount |
| Max. frame rate at full resolution | 59 fps at 525 MByte/s, Mono8 |
| ADC | 12 Bit |
| Image buffer (RAM) | 512 MByte |
| Non-volatile memory (Flash) | 1024 KByte |

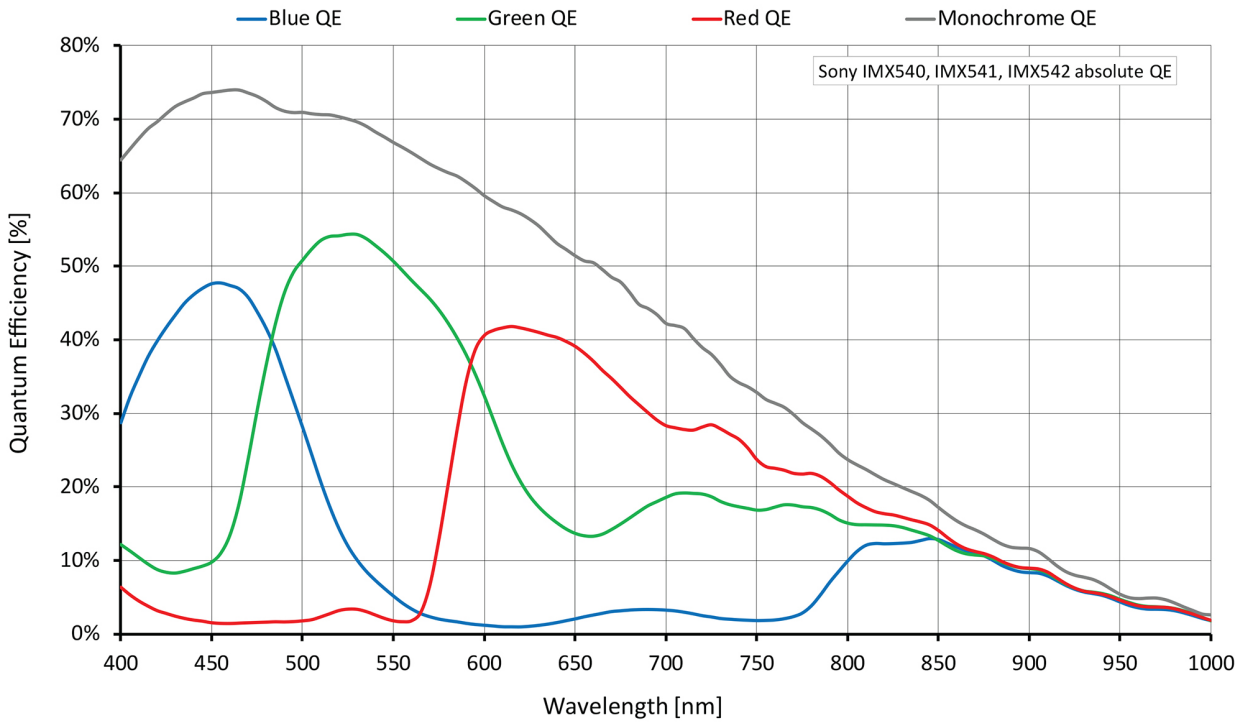
| **Output** | |
|---|---|
| Bit depth | 12-bit Bit |
| Monochrome pixel formats | Mono8, Mono10, Mono10p, Mono12, Mono12p |
| YUV color pixel formats | YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr |
| RGB color pixel formats | BayerRG8, BayerRG10, BayerRG10p, BayerRG12, BayerRG12p, BGR8, RGB8 (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 | +5 °C to +60 °C housing temperature |
| Power requirements (DC) | 10.8 to 26.4 VDC AUX \| IEEE 802.3af, Power Class 0 PoE |

| | |
|---|---|
| Power consumption | External power: 6.5 W at 12 VDC (typical) \| Power over Ethernet: 7.1 W (typical) |
| Mass | 100 g |
| Body dimensions (L × W × H in mm) | 60 × 29 × 29 |

## Quantum efficiency



# Features

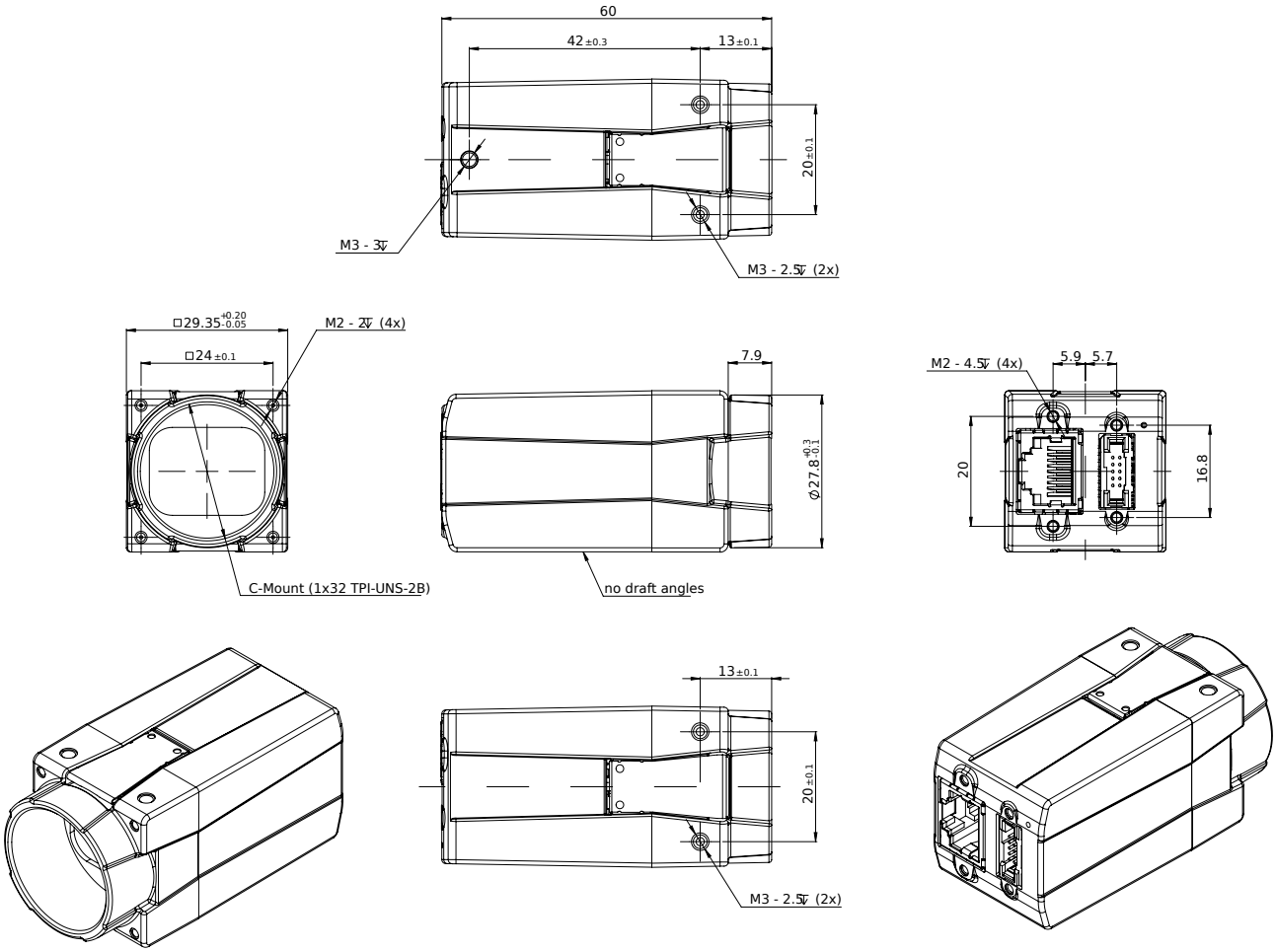
## Image control: Auto

- 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

## Camera control

- Acquisition frame rate
- Action commands, incl. ToE (trigger over Ethernet)
- Bandwidth control
- Counters and timers
- Firmware update in the field
- I/O and trigger control
- Serial I/Os
- Temperature monitoring
- User sets

# Technical drawing