



General

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|-----------------|-----------|
| Model: | exo249CGE |
| Product code: | F002181 |
| Product series: | EXO GigE |
| Status: | Available |

Sensor

| | |
|---------------------------------|---|
| Sensor type: | Area scan |
| Chroma: | Color |
| Spectrum: | Visible |
| Spectral range: | 400 nm to 1000 nm |
| Resolution: | 1,920 × 1,200 (2.30 MP) |
| Sensor model: | Sony IMX249LQJ |
| Sensor architecture (material): | cmos |
| Shutter type(s): | global-shutter |
| Sensor size: | 11.25 × 7.03 mm (13.27 mm, 13.4mm (Type 1/1.2)) |
| Pixel size: | 5.86 μm × 5.86 μm |

Pixel formats

| | |
|--------------------|-----------------------|
| Sensor bit depth: | 8-Bit,12-Bit,12-Bit |
| RGB pixel formats: | bayer8, bayer12packed |

Imaging performance

Dynamic range: 72 dB

SNR: 44 dB

Timing and gain

Max. frame rate: 41

Max. frame rate burst: 41.6 fps

Exposure time: 34 μ s to 60 s

Gain: 0.0 dB to 48.0 dB

I/Os and power

Non-isolated lines: 0 x LVDS input, 0 x LVDS output, 0 x TTL input, 0 x TTL output, 2 x 24V input, 4 x Open drain output,

Specific non-isolated lines: 1 x RS232 input, 1 x RS232 output, 0 x RS422 input, 0 x RS422 output,

Opto-isolated lines: 1 x Optical isolated input, 0 x Optical isolated input,

Power supply: 10 to 25VDC, Power over Ethernet

Power consumption: External: 4.5 W (typical)

Operating conditions

Operating temperature (housing): -10 °C to 60 °C

Mechanical properties

Body dimensions (L x W x H in mm): 43 x 50 x 50

Filter/protection glass: IR-Cut - 680nm

IP class: IP40

Lens mount(s): C-Mount

Weight: 140 g

On-board memory and FPGA

Image buffer (RAM): 192 MByte

Non-volatile memory (Flash): 32 MByte

Interfaces

Digital interface: gige

Interface connector: (RJ-45)

FW features - image control

Exposure modes: Manual, Auto, External

FW features - image control

Gain modes: Auto, Manual

White balance modes: auto, manual

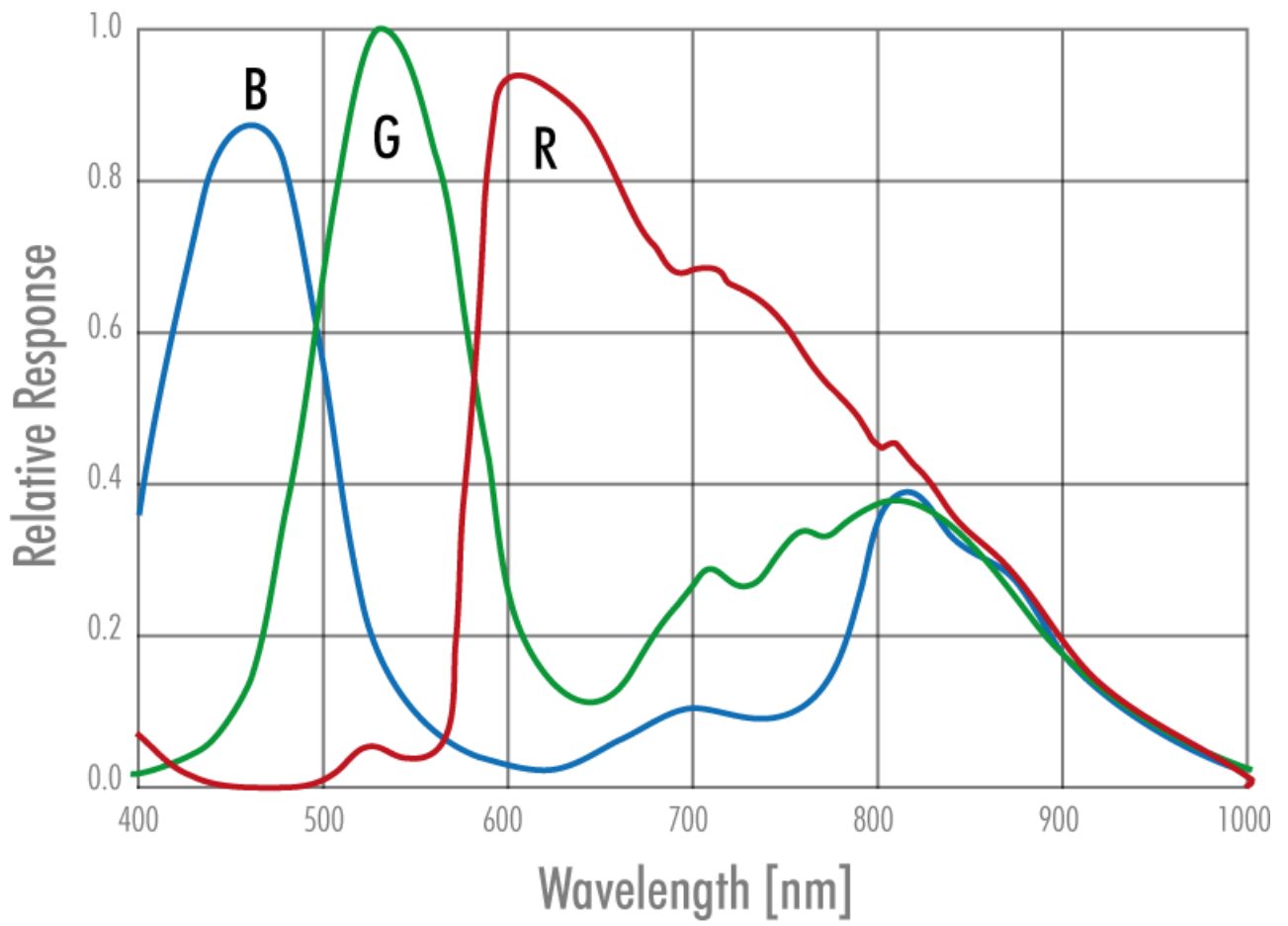
Image control features: FW Features - Image Control

FW features - camera control

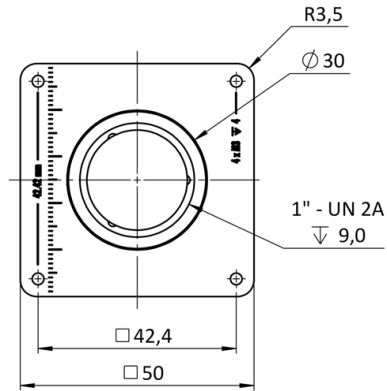
Trigger modes/sync: INTERNAL,SOFTWARE,EXTERNAL

Camera control features: PTP, BurstMode, User Sets, POE, PWM(4), Sequencer,

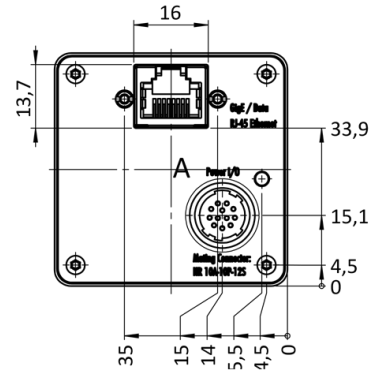
Quantum Efficiency



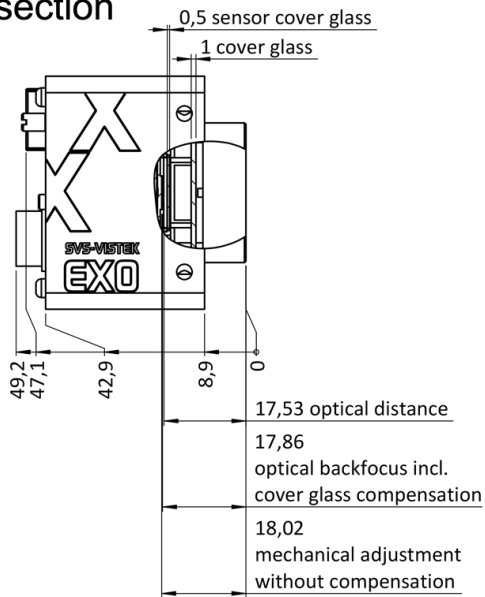
front



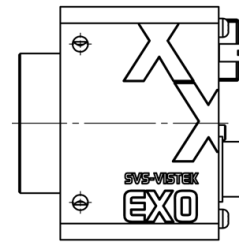
back



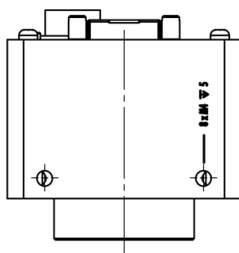
cross section



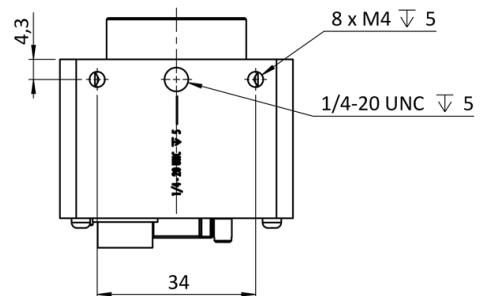
right side

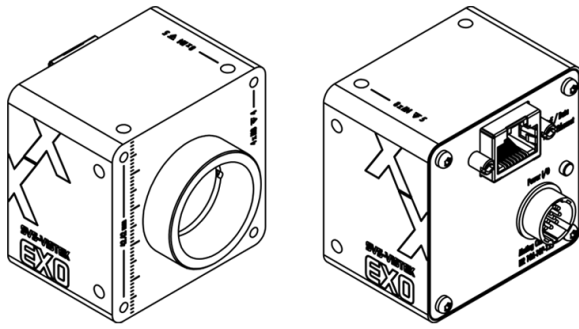


top



bottom





I/O pin assignment



| | | | |
|---|-------------------------|----|--------------------|
| 1 | VIN - (GND) | 7 | OUT 1 (open drain) |
| 2 | VIN + (10 V to 25 V DC) | 8 | OUT 2 (open drain) |
| 3 | IN 4 (RXD RS232) | 9 | IN 3 + (opto In +) |
| 4 | OUT 4 (TXD RS232) | 10 | IN 3 - (opto In -) |
| 5 | IN 1 (0-24V) | 11 | OUT 3 (open drain) |
| 6 | IN 2 (0-24V) | 12 | OUT 0 (open drain) |