



General

| | |
|-----------------|-----------|
| Model: | exo546MGE |
| Product code: | F002172 |
| Product series: | EXO GigE |
| Status: | Available |

Sensor

| | |
|---------------------------------|---|
| Sensor type: | Area scan |
| Chroma: | Mono |
| Spectrum: | Visible |
| Spectral range: | 400 nm to 1000 nm |
| Resolution: | 2,840 × 2,840 (8.10 MP) |
| Sensor model: | Sony IMX546LLA |
| Sensor architecture (material): | cmos |
| Shutter type(s): | global-shutter |
| Sensor size: | 7.78 × 7.78 mm (11 mm, 11.1mm (Type 2/3)) |
| Pixel size: | 2.74 μm × 2.74 μm |

Pixel formats

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|---------------------------|---------------------|
| Sensor bit depth: | 8-Bit,12-Bit,12-Bit |
| Monochrome pixel formats: | mono8, mono12packed |

Timing and gain

| | |
|------------------|-------------------|
| Max. frame rate: | 15 fps |
| Exposure time: | 6 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

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

Mechanical properties

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|------------------------------------|-----------------------------|
| Body dimensions (L x W x H in mm): | 43 x 50 x 50 |
| Filter/protection glass: | K9 - AR coating - 400-850nm |
| IP class: | IP40 |
| Lens mount(s): | C-Mount |
| Weight: | 143 g |

On-board memory and FPGA

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|------------------------------|-----------|
| 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 |
| Gain modes: | Auto, Manual |
| Image control features: | FW Features - Image Control |

FW features - camera control

| | |
|---------------------|----------------------------|
| Trigger modes/sync: | INTERNAL,SOFTWARE,EXTERNAL |
|---------------------|----------------------------|

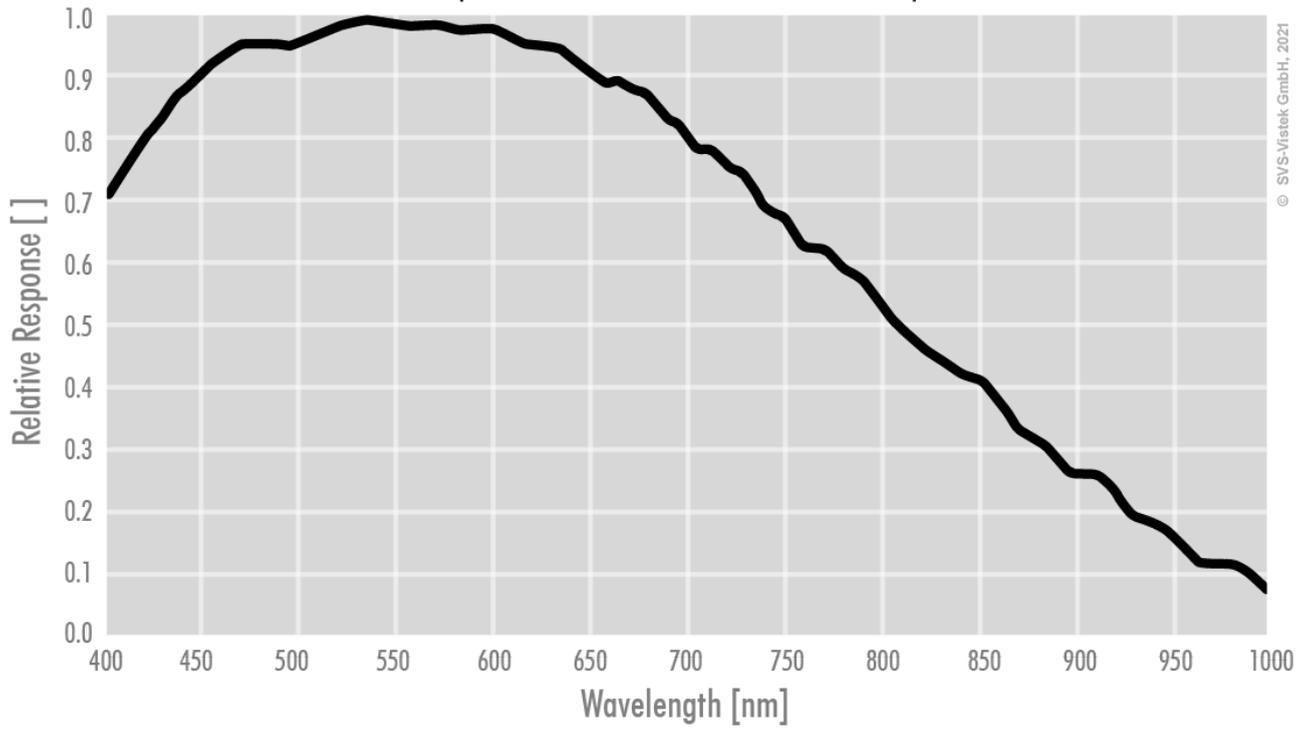
FW features - camera control

Camera control features:

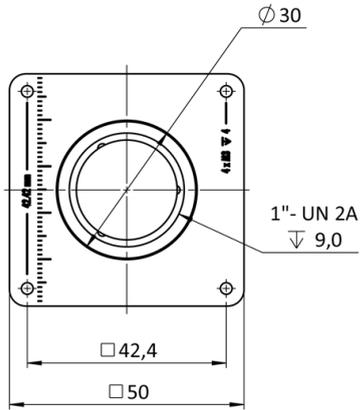
PTP, User Sets, POE, PWM(4), Sequencer,

Monochrome

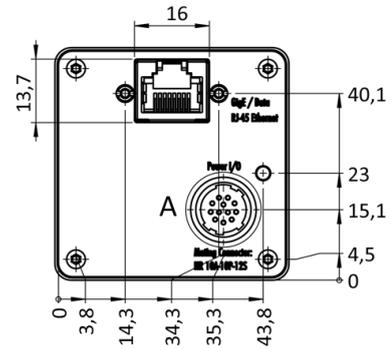
(not included: lens- and light source characteristics)



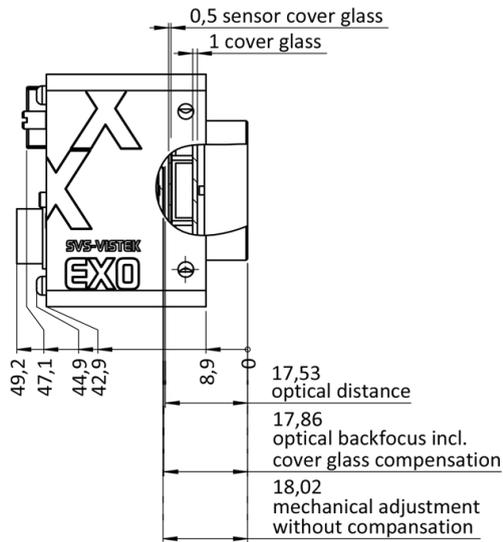
front



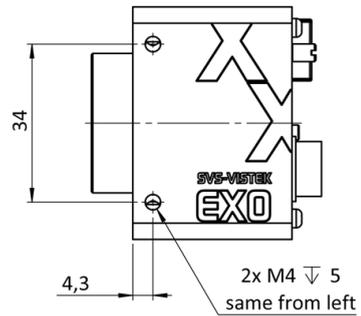
back



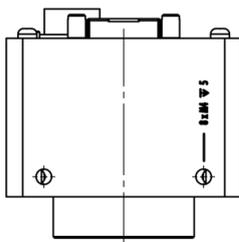
cross section



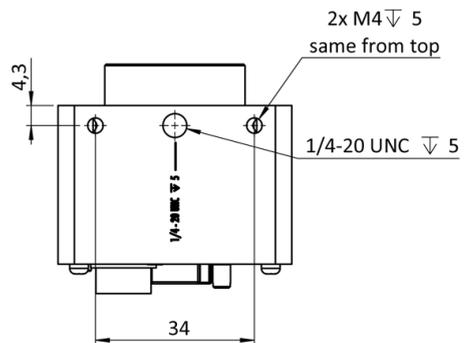
right side



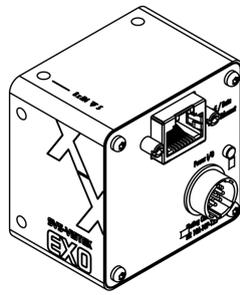
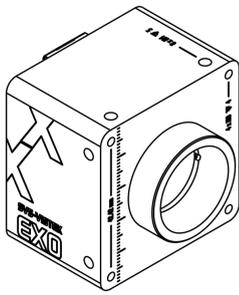
top



bottom

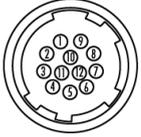


3D



I/O pin assignment

Hirose 12 Pin



| | | | | | |
|---|-------|-------------------|----|--------|--------------|
| 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) |