



# FXO 10GigE

fxo537MXGE

## General

|                |            |
|----------------|------------|
| Model          | fxo537MXGE |
| Product code   | F002358    |
| Product series | FXO 10GigE |
| Status         | Available  |

## Sensor

|                                |                                      |
|--------------------------------|--------------------------------------|
| Sensor type                    | Area scan                            |
| Chroma                         | Mono                                 |
| Spectrum                       | Visible                              |
| Spectral range                 | 400 nm to 1000 nm                    |
| Resolution                     | 2,448 × 2,048 (5.00 MP)              |
| Sensor model                   | Sony IMX537                          |
| Sensor architecture (material) | cmos                                 |
| Shutter type(s)                | Global shutter (GS)                  |
| Sensor size                    | 6.71 × 5.61 mm (8.75 mm, Type 1/1.8) |
| Pixel size                     | 2.74 µm × 2.74 µm                    |

## Pixel formats

|                          |               |
|--------------------------|---------------|
| Sensor bit depth         | 8-bit, 12-bit |
| Monochrome pixel formats | mono8, mono12 |

## Timing and gain

|                 |                   |
|-----------------|-------------------|
| Max. frame rate | 242.2 fps         |
| Exposure time   | 5 µs 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,                                               |
| I/O connector               | 12-pin Hirose HR10A-10P-12S                                                                           |
| Power supply                | 10 to 25VDC                                                                                           |
| Power consumption           | External: 12 W (typical)                                                                              |

## Operating conditions

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

## Mechanical properties

|                                   |                             |
|-----------------------------------|-----------------------------|
| Body dimensions (L x W x H in mm) | 76 × 50 × 50                |
| Filter/protection glass           | K9 - AR coating - 400-850nm |
| IP class                          | IP30                        |
| Lens mount(s)                     | C-Mount                     |
| Weight                            | 240 g                       |

## On-board memory and FPGA

|                             |           |
|-----------------------------|-----------|
| Image buffer (RAM)          | 896 MByte |
| Non-volatile memory (Flash) | 32 MByte  |

## Interfaces

|                     |                      |
|---------------------|----------------------|
| Digital interface   | 10gige               |
| Interface connector | (RJ-45)              |
| Vision standard     | GigE Vision 2.0, 3.0 |

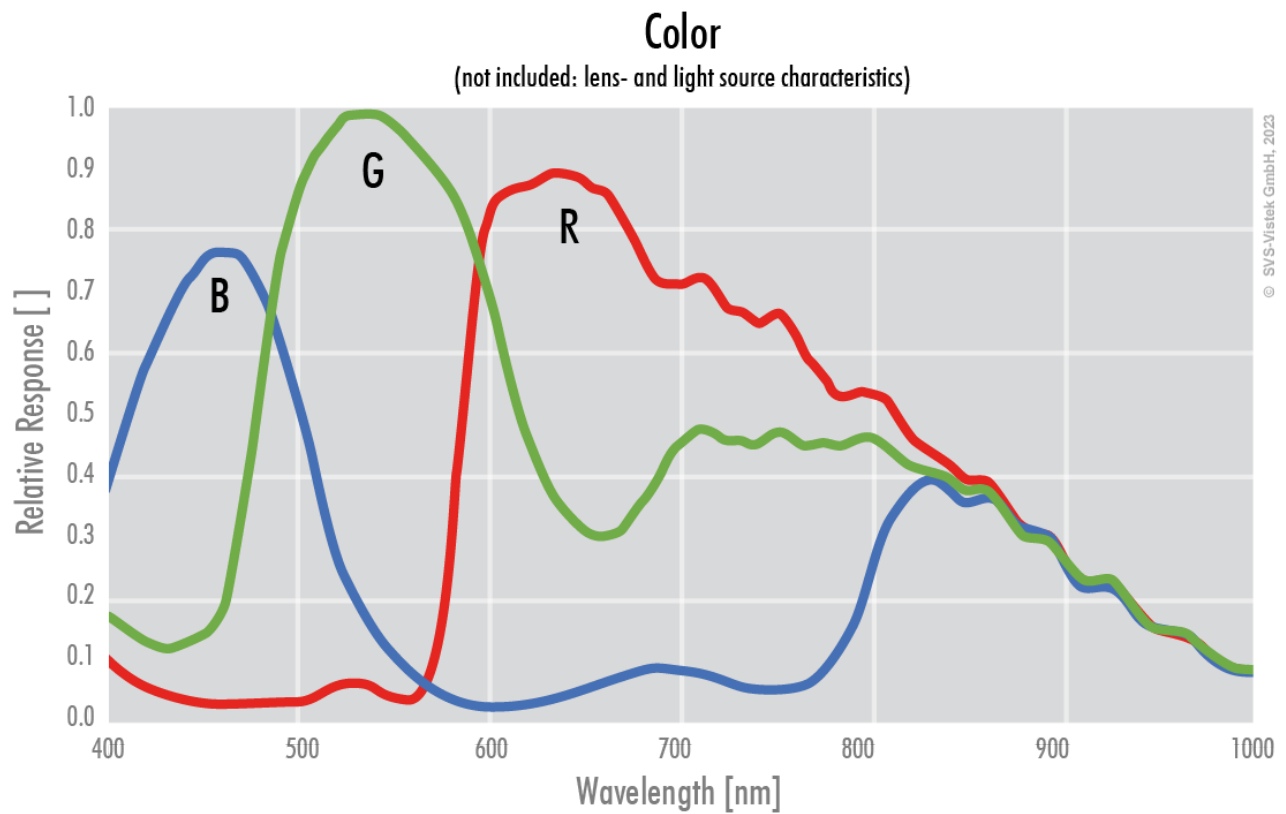
## FW features - image control

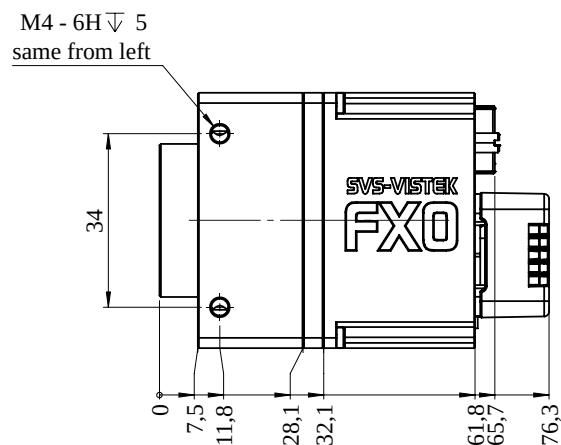
|                        |                                                      |
|------------------------|------------------------------------------------------|
| Exposure modes         | manual, auto, external                               |
| Gain modes             | auto, manual                                         |
| White balance modes    | auto, manual                                         |
| Image control features | roi, lut, mirror-image, dpc, shading-correction, ffc |

## FW features - camera control

|                         |                                                  |
|-------------------------|--------------------------------------------------|
| Trigger modes/sync      | internal, software, external                     |
| Camera control features | PTP, RDMA support, User Sets, PWM(4), Sequencer, |

## Quantum Efficiency







## 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) |