

# fxo542MXGE

FXO 10GigE



With the modern Sony Pregius S sensor, the FXO 10GigE offers outstanding image quality together with an economical high-performance interface. Distances up to 100m are supported. The control is transparent to GigE Vision.

The solid, CNC-milled housing offers excellent temperature management gives excellent image homogeneity.

The large image memory supports the rapid triggering of image sequences regardless of the network load.

## Technical Highlights

- > Excellent homogeneity across the entire image
- > Thermally optimized, milled aluminum housing
- > 10GigE Interface with PoE single cable option
- > Integrated 4-channel LED strobe controller
- > ROI, lookup tables
- > Binning with frame rate boost
- > C mount
- > IO interface with 2xIN, 4xOUT, Opto and RS232
- > with SafeTrigger, programmable timers, logic functions (PLC) and sequencer

FXO Series

fxo542MXGE

|                    |                   |
|--------------------|-------------------|
| Resolution [MP]    | 16.1 MP           |
| Resolution (h x v) | 5320 x 3032 px    |
| Frame rate (max.)  | 45.6 fps          |
| Chroma             | mono              |
| Interface          | 10GigE<br>(RJ-45) |

Sensor

|                     |                   |
|---------------------|-------------------|
| Sensor              | IMX542LLA         |
| Manufacturer        | Sony              |
| Sensor type         | Area CMOS         |
| Shutter type        | global shutter    |
| Sensor size (h x v) | 14.58 x 8.31 mm   |
| Optical diagonal    | 16.78 mm          |
| Sensor format       | 16.8mm (Type 1.1) |
| Pixel size (h x v)  | 2.74 x 2.74 μm    |

Camera

|                     |                               |
|---------------------|-------------------------------|
| Exposure modes      | MANUAL;AUTO                   |
| Trigger modes       | INTERNAL;SOFTWARE;EXTERNAL    |
| Exposure time (min) | 21 μs                         |
| Exposure time (max) | 1 sec                         |
| Pixel format / max  | mono8, mono12 / 12 bit        |
| Gain modes          | manual, auto                  |
| S/N ratio (max)     | 39.2 dB (dep. on environment) |
| Dynamic range (max) | 72 dB (dep. on environment)   |
| Internal memory     | 1024 MB SDRAM, 256 MB Flash   |

Feature Set

|                         |                |
|-------------------------|----------------|
| AOI                     | yes            |
| LUT                     | yes            |
| Offset                  | yes            |
| Binning                 | yes            |
| Image flip              | yes            |
| Shading correction      | yes (external) |
| Defect pixel correction | yes            |
| Sequencer               | yes            |
| POE                     | yes            |
| PTP                     | yes            |
| Data Storage            | yes optional   |

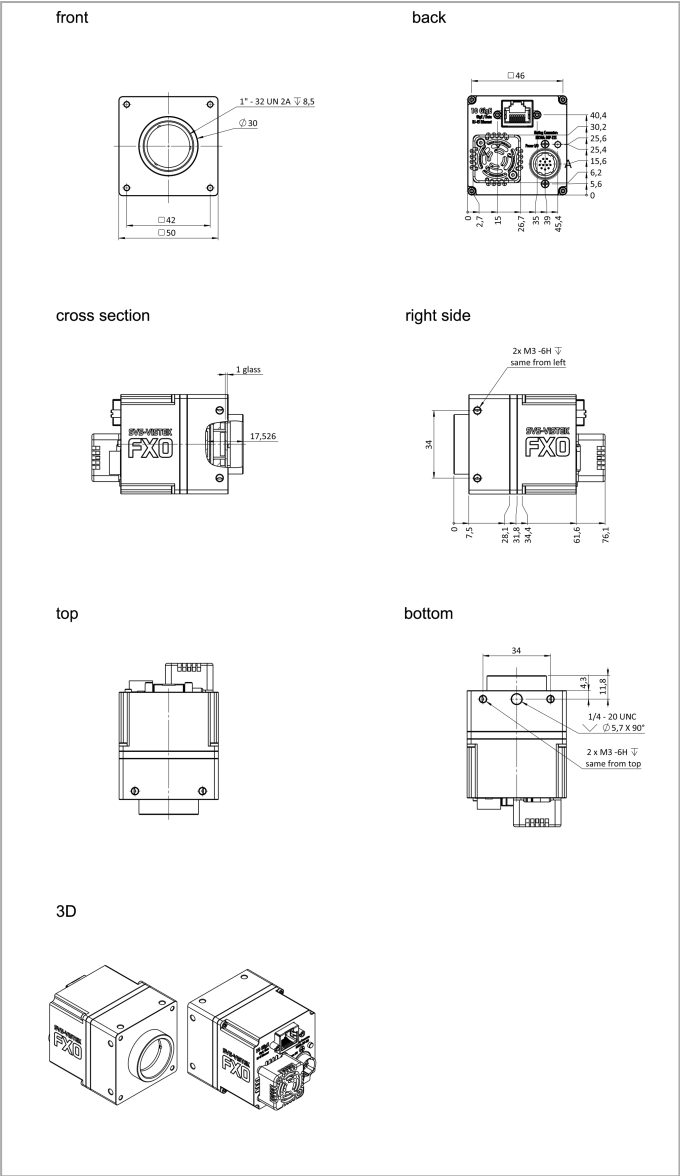
Housing

|                                 |                             |
|---------------------------------|-----------------------------|
| Lens mount                      | C-Mount                     |
| Dimensions (w x h x d)          | 50 x 50 x 76.1 mm           |
| Weight                          | 240 g                       |
| Operating temperature (housing) | -10 to 60 °C                |
| Ambient humidity                | 10 to 90 % (non-condensing) |
| Protection class                | IP30                        |
| Filter-/Coverglass              | K9 - AR coating - 400-850nm |

I/O-Interfaces

|                   |                 |
|-------------------|-----------------|
| Input up to 24V   | 2 x             |
| Input OPTO        | 1 x             |
| Output open drain | 4 x             |
| I/O RS-232        | 1 x             |
| Power supply      | 10 to 25 V (DC) |

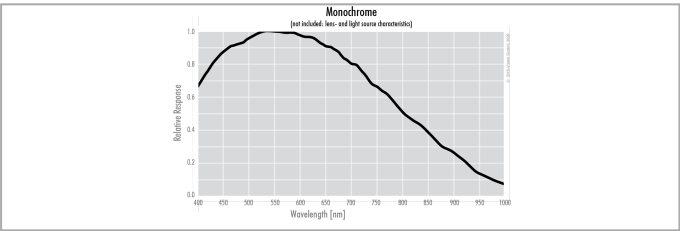
Dimensions [mm]



Pinout Mating Connector

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

Spectral Response \*



\* Sensor data — excludes camera cover- or IR-cut filter characteristics

