

fxo545MXGE

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/CS mount and M42
- > IO interface with 2xIN, 4xOUT, Opto and RS232
- > with SafeTrigger, programmable timers, logic functions (PLC) and sequencer

FX0 Series

fx0545MXGE

| | |
|--------------------|----------------|
| Resolution [MP] | 12.3 MP |
| Resolution (h x v) | 4096 x 3000 px |
| Frame rate (max.) | 61 fps |
| Chroma | mono |
| Interface | 10GigE |

Sensor

| | |
|---------------------|-------------------|
| Sensor | IMX545LLA |
| Manufacturer | Sony |
| Sensor type | Area CMOS |
| Shutter type | global shutter |
| Sensor size (h x v) | 11.22 x 8.22 mm |
| Optical diagonal | 13.91 mm |
| Sensor format | 14mm (Type 1/1.1) |
| Pixel size (h x v) | 2.74 x 2.74 μm |

Camera

| | |
|---------------------|-----------------------------|
| Exposure modes | MANUAL;AUTO |
| Trigger modes | INTERNAL;SOFTWARE;EXTERNAL |
| Exposure time (min) | 19 μs |
| Exposure time (max) | 1 sec |
| Pixel format / max | mono8, mono12 / 12 bit |
| Gain modes | manual, auto |
| S/N ratio (max) | 39 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 |

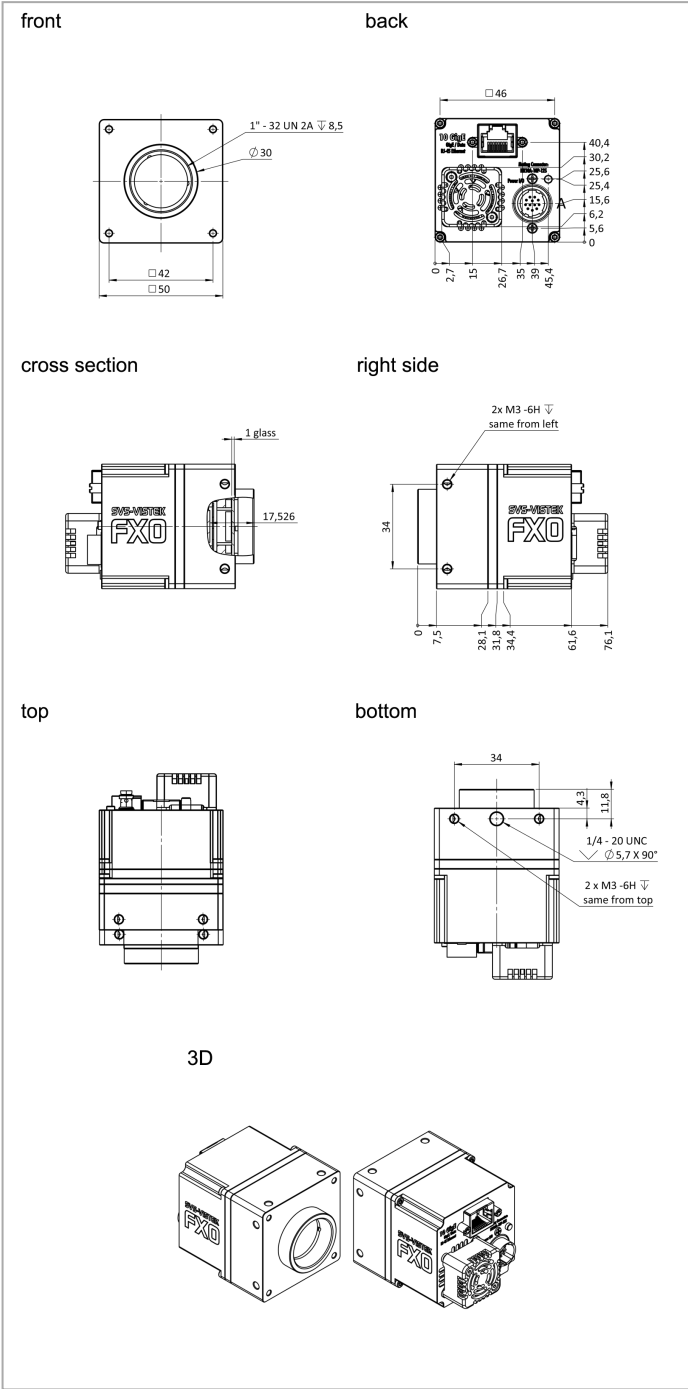
Housing

| | |
|---------------------------------|-----------------------------|
| 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 |

I/O-Interfaces

| | |
|-----------------|-----|
| Input up to 24V | 2 x |
| Input OPTO | 1 x |

Dimensions [mm]

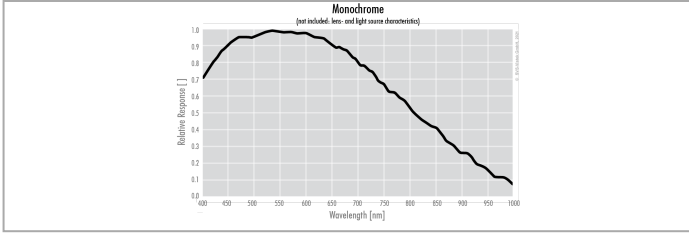


Pinout Mating Connector

| | | |
|---------------|---------------------------|-----------------------|
| 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 *

| | |
|-------------------|-------------------------------|
| Output open drain | 4 x |
| I/O RS-232 | 1 x |
| Power supply | 10 to 25 V (DC) |
| Power consumption | 12 W (dep. on operating mode) |



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