



## General

Model:	fxo542MCX
Product code:	F002088
Product series:	FXO CoaXPress
Status:	Available

## Sensor

Sensor type:	Area scan
Chroma:	Mono
Spectrum:	Visible
Spectral range:	400 nm to 1000 nm
Resolution:	5,312 × 3,032 (16.10 MP)
Sensor model:	Sony IMX542LLA
Sensor architecture (material):	cmos
Shutter type(s):	global-shutter
Sensor size:	14.55 × 8.31 mm (16.76 mm, 16.8mm (Type 1.1))
Pixel size:	2.74 μm × 2.74 μm

## Pixel formats

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

## Imaging performance

Dynamic range:	72 dB
SNR:	39.9 dB

## Timing and gain

Max. frame rate:	45.6 fps
Exposure time:	10 $\mu$ 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 CoaXPress
Power consumption:	External: 9 W (typical)

## Operating conditions

Operating temperature (housing):	-10 °C to 65 °C
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## Mechanical properties

Body dimensions (L x W x H in mm):	70 x 50 x 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

Non-volatile memory (Flash):	32 MByte
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## Interfaces

Digital interface:	cxp-12 with 1 connection
Interface connector:	(micro-BNC)

## FW features - image control

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

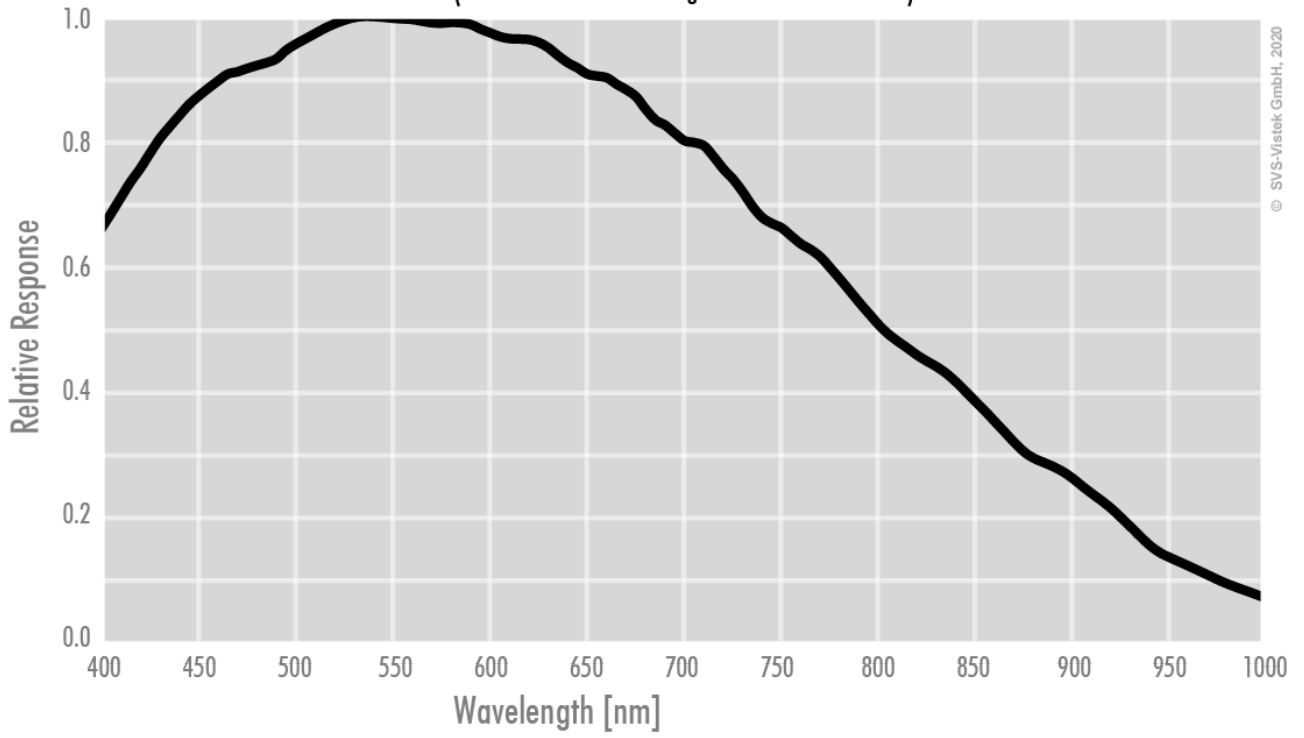
## FW features - camera control

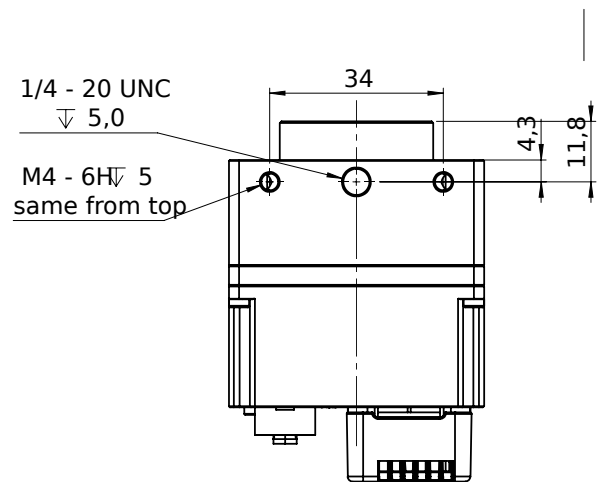
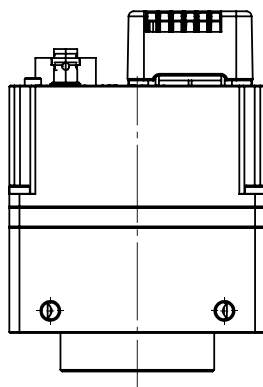
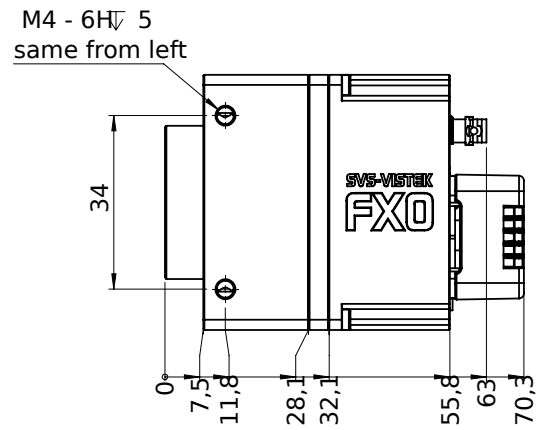
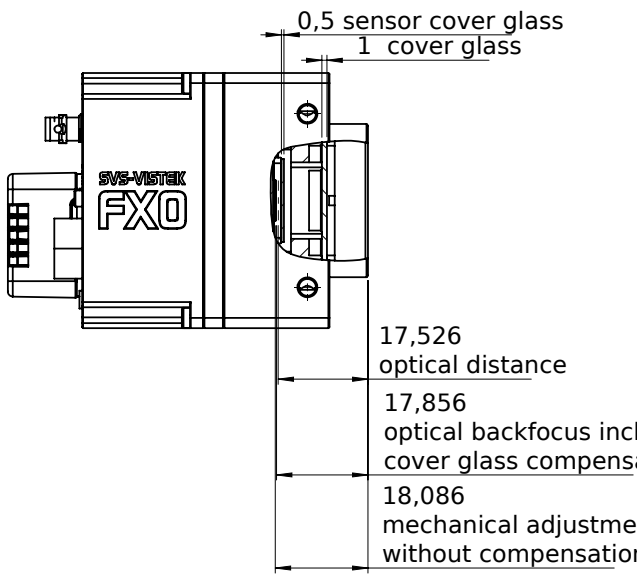
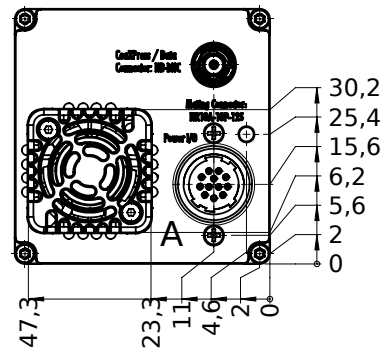
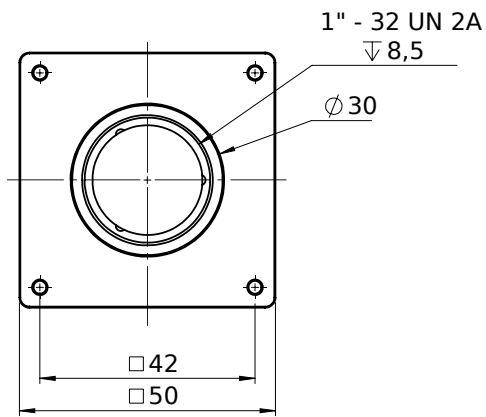
Trigger modes/sync: INTERNAL,SOFTWARE,EXTERNAL

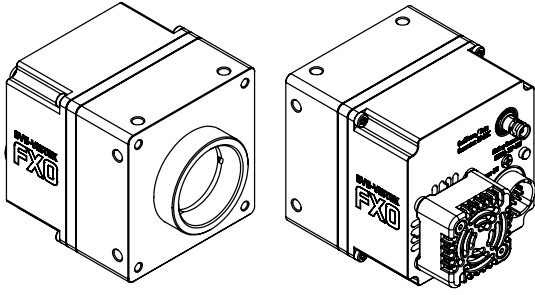
Camera control features: PoCxP, User Sets, PWM(4), Sequencer,

## Monochrome

(not included: lens- and light source characteristics)







## I/O pin assignment

Hirose 12 Pin



1	VIN - (GND)	7	OUT1 (open drain)
2	VIN + (10V to 25V DC)	8	OUT2 (open drain)
3	IN4 (RXD RS232)	9	IN3 + (opto In +)
4	OUT4 (TXD RS232)	10	IN3 - (opto In -)
5	IN1 (0-24V)	11	OUT3 (open drain)
6	IN2 (0-24V)	12	OUT0 (open drain)