

## FX0 CoaXPress

# fxo531MCX12-2C

The FX0 CoaXPress offers the modern Sony Pregius S sensor with a high-performance interface. This camera is characterized by excellent Jitter and latency behavior. The thin CoaXPress cable supports distances up to 25m.

The solid, CNC-milled housing offers an excellent temperature management and allows an operating temperature of up to 60°C for most sensors.

The fan can be fully deactivated via software and features a hermetic seal that isolates airflow from internal components, ensuring compatibility with critical cleanroom environments. Optional heatsinks help keep your camera in optimal operating conditions.



## Technical Highlights

- Thermally optimized aluminum housing
- extremely low Jitter
- CoaXPress-12 interface, PoCXP
- Integrated 4-channel LED strobe controller
- ROI, binning, lookup tables
- IO interface with 2xIN, 4xOUT, Opto and RS232 with SafeTrigger, programmable timers, logic functions (PLC) and sequencer



## Specifications

Resolution [MP]	20.4 MP
Resolution (h x v)	4512 x 4512 px
Frame rate(max.)	109.5 fps
Chroma	mono
Interface	CXP-12 with 2 Connections (micro-BNC)

## Sensor

Sensor	IMX531AAMJ
Manufacturer	Sony
Sensor type	Area CMOS
Shutter type	global shutter
Sensor size (h x v)	12.36 x 12.36 mm
Optical diagonal	17.48 mm
Sensor format	17.5mm (Type 1.1)
Pixel size (h x v)	2.74 x 2.74 $\mu\text{m}$

## Camera

Exposure modes	MANUAL;AUTO;EXTERNAL
Trigger modes	INTERNAL;SOFTWARE;EXTERNAL
Exposure time (min)	21 $\mu\text{s}$
Exposure time (max)	60 sec (external $\infty$ )
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, 32 MB Flash

## Feature Set

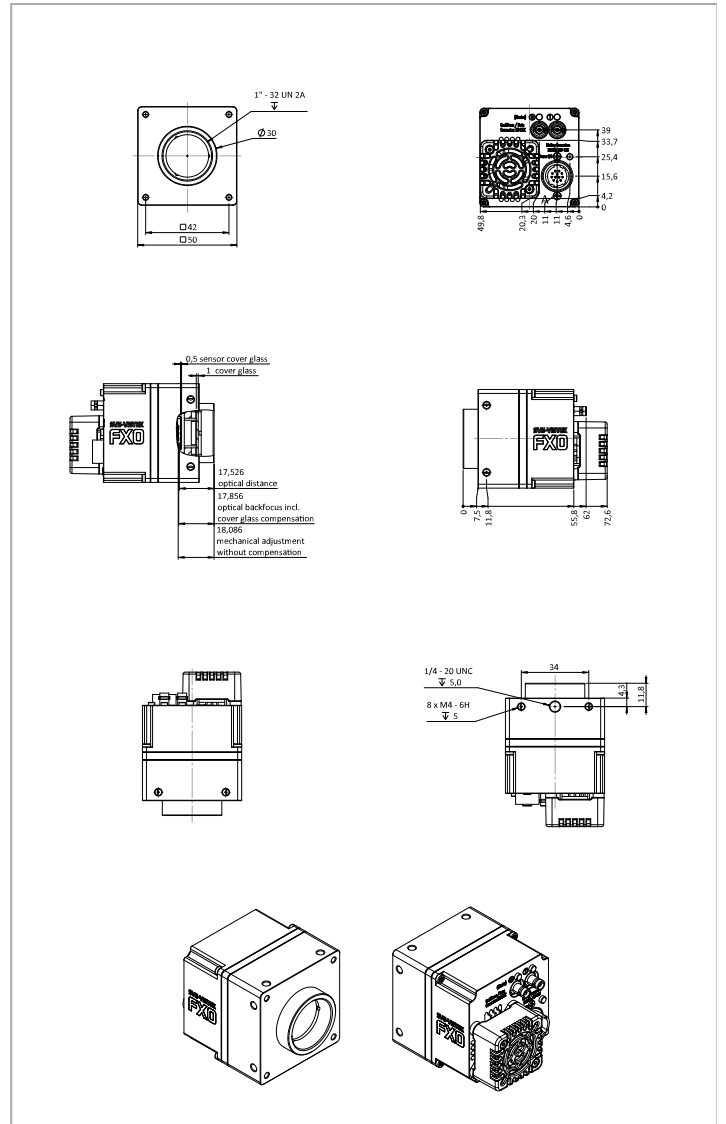
AOI	yes
LUT	yes
Offset	yes
Binning	yes
Image flip	yes
Shading correction	yes (external)
Defect pixel correction	yes
Sequencer	yes
PoCXP	yes

## Housing

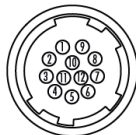
Lens mount	C-Mount
Dimensions (w x h x d)	50 x 50 x 72.6 mm
Weight	240 g
Operating temperature (housing)	-10 to 60 °C
Ambient humidity	10 to 90 % (non-condensing)
Protection class	IP30
Filter-/Coverglass	K9 - AR coating - 400-850nm

## I/O-Interfaces

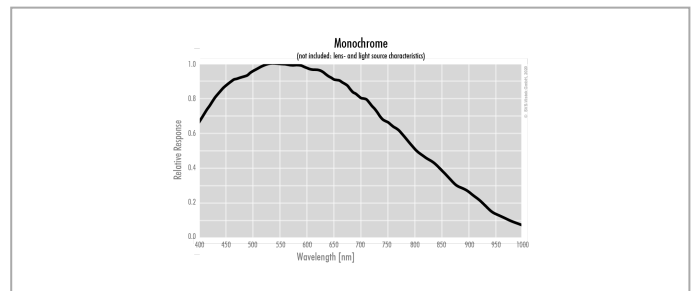
Input up to 24V	2 x
Input OPTO	1 x
Output open drain	4 x
I/O RS-232	1 x
Power supply	10 to 25 V (DC)
Power consumption	14 W (dep. on operating mode)



## 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