

FX0 CoaXPress

fxo421MCX12-2C

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]	2.8 MP
Resolution (h x v)	1936 x 1464 px
Frame rate (max.)	4/3.5 fps
Chroma	mono
Interface	CXP-12 with 2 Connections (micro-BNC)

Sensor

Sensor	IMX421LLJ-C
Manufacturer	Sony
Sensor type	Area CMOS
Shutter type	global shutter
Sensor size (h x v)	8.71 x 6.59 mm
Optical diagonal	10.92 mm
Sensor format	11.0mm (Type 2/3)
Pixel size (h x v)	4,5 x 4,5 µm

Camera

Exposure modes	MANUAL;AUTO;EXTERNAL
Trigger modes	INTERNAL;SOFTWARE;EXTERNAL
Exposure time (min)	7 µs
Exposure time (max)	60 sec (external ∞)
Pixel format / max	mono8, mono12 / 12 bit
Gain modes	manual, auto
Internal memory	1024 MB SDRAM, 32 MB Flash

Feature Set

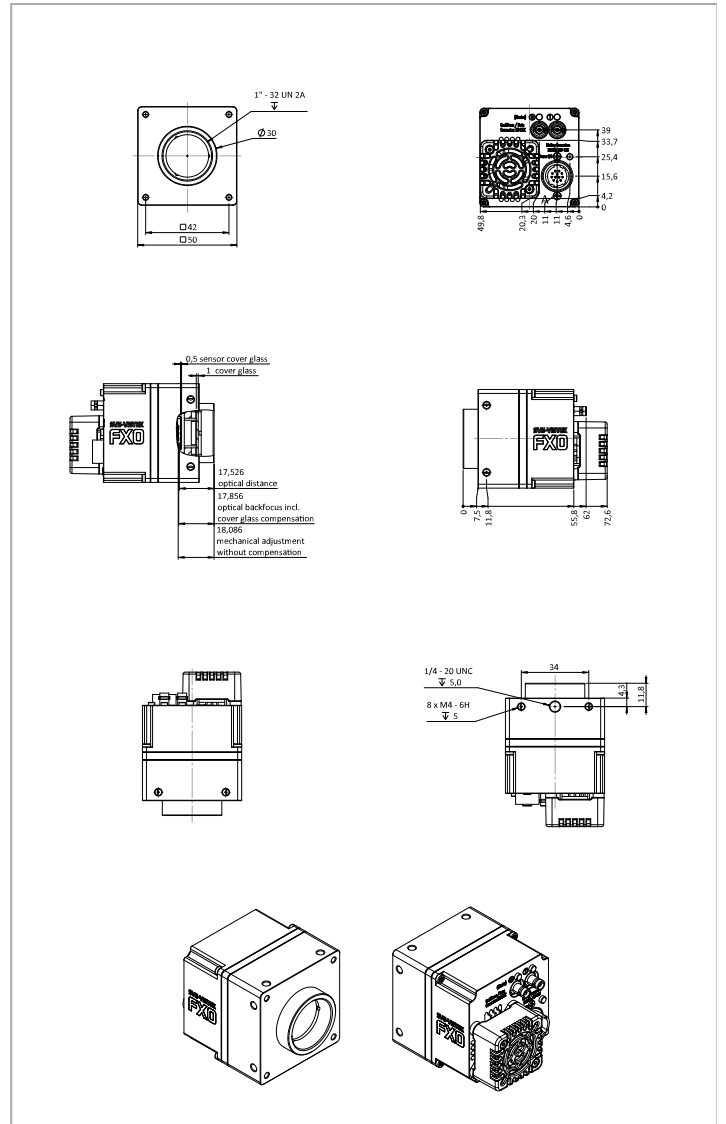
AOI	yes
LUT	yes
Offset	yes
Binning	yes
Image flip	yes
Shading correction	yes (external)
Defect pixel correction	yes
Sequencer	yes
PoCXP	yes

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

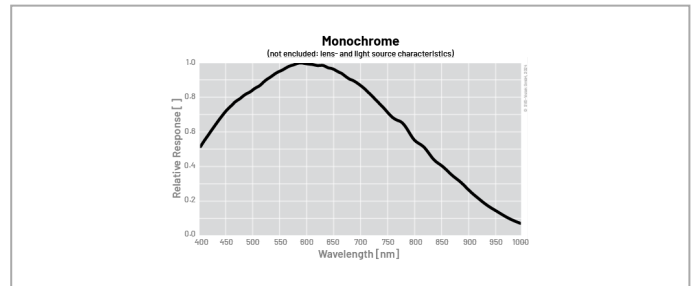
Input up to 24V	2 x
Input OPTO	1 x
Output open drain	4 x
I/O RS-232	1 x
Power supply	10 to 25 V (DC)
Power consumption	13 W (dep. on operating mode)



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