

FX0 CoaXPress

fxo545CCX

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



LED
4 INTEGRATED
LED CONTROLLERS

SEQ
INTEGRATED
SEQUENCER

STT
SAFE TRIGGER
TECHNOLOGY

PLC
PROGRAMMABLE
LOGIC CONTROL

Specifications

Resolution [MP]	12.3 MP
Resolution (h x v)	4096 x 3000 px
Frame rate(max.)	61 fps
Chroma	color
Interface	CXP-12 with 1 Connection (micro-BNC)

Sensor

Sensor	IMX545LQA
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;EXTERNAL
Trigger modes	INTERNAL;SOFTWARE;EXTERNAL
Exposure time (min)	8 μs
Exposure time (max)	60 sec (external ∞)
Pixel format / max	bayer8, bayer12 / 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

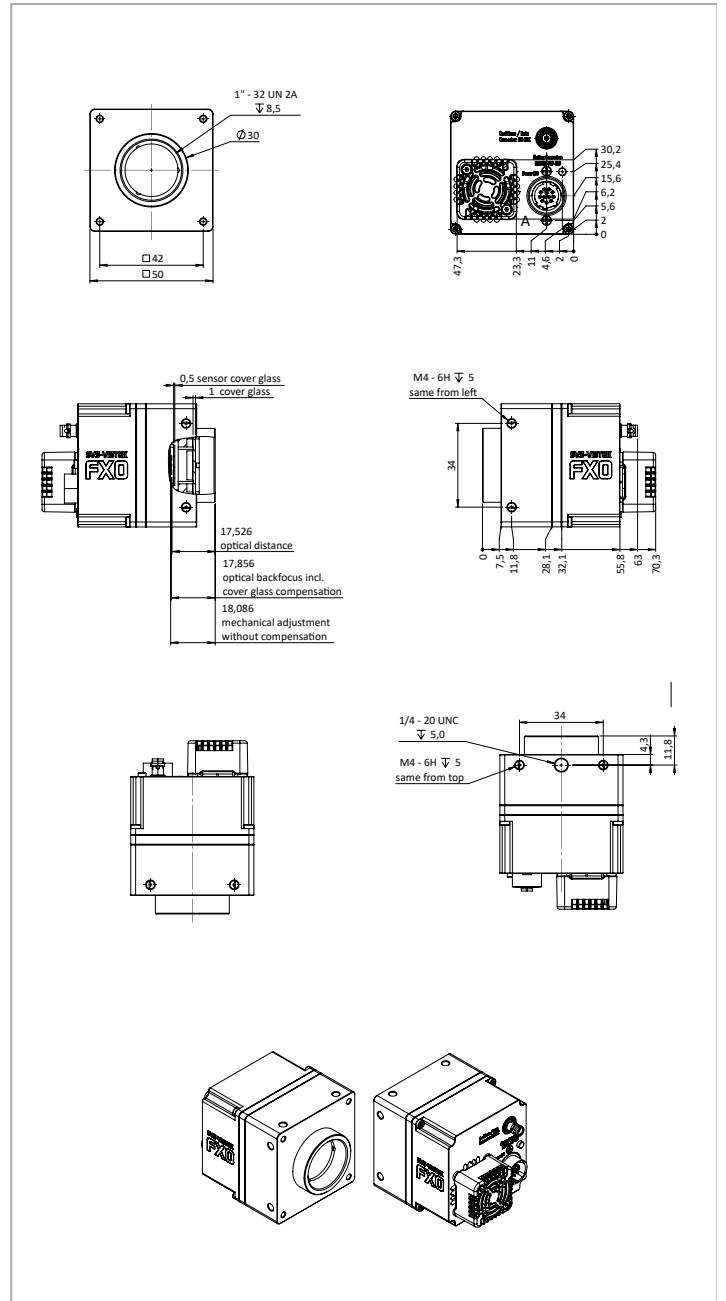
Manual white balance	yes
Automatic white balance	yes
AOI	yes
LUT	yes
Offset	yes
Binning	yes
Image flip	yes
Sequencer	yes
PoCXP	yes

Housing

Lens mount	C-Mount
Dimensions (w x h x d)	50 x 50 x 70.1 mm
Weight	240 g
Operating temperature (housing)	-10 to 65 °C
Ambient humidity	10 to 90 % (non-condensing)
Protection class	IP30
Filter-/Coverglass	IR-Cut 680

I/O-Interfaces

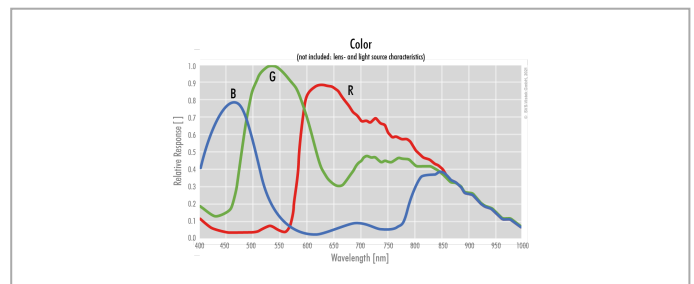
Input up to 24V	2 x
Input OPTO	1 x
Output open drain	4 x
I/O RS-232	1 x
Power supply	10 to 25 V (DC)
Power consumption	8 W (dep. on operating mode)



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

