

## FX0 CoaXPress

# fxo545MCX

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

CHAT WITH US



## Specifications

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

## 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 $\mu\text{m}$ |

## Camera

|                     |                             |
|---------------------|-----------------------------|
| Exposure modes      | MANUAL;AUTO;EXTERNAL        |
| Trigger modes       | INTERNAL;SOFTWARE;EXTERNAL  |
| Exposure time (min) | 5 $\mu\text{s}$             |
| 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

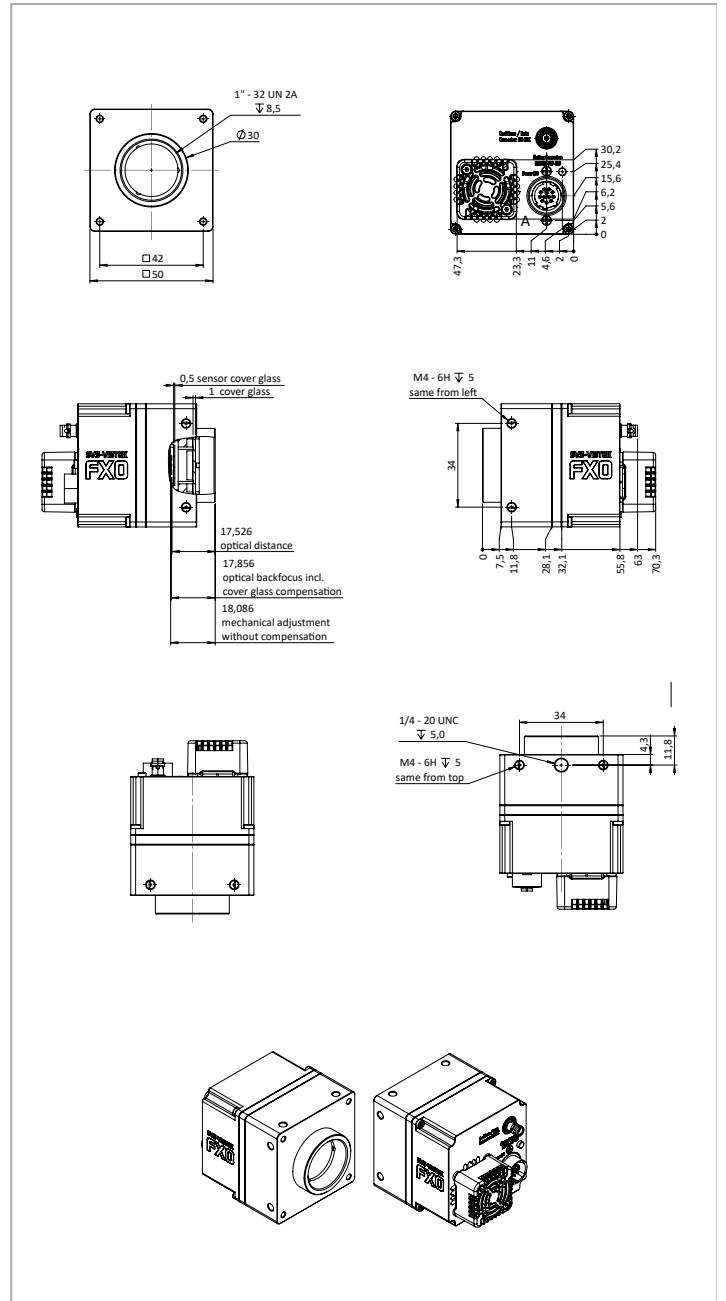
|                         |                |
|-------------------------|----------------|
| AOI                     | yes            |
| LUT                     | yes            |
| Offset                  | yes            |
| Binning                 | yes            |
| Image flip              | yes            |
| 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 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              | K9 - AR coating - 400-850nm |

## I/O-Interfaces

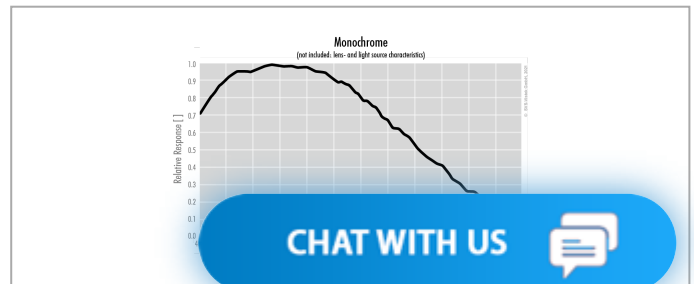
|                   |                              |
|-------------------|------------------------------|
| Input up to 24V   | 2 x                          |
| Input OPTO        | 1 x                          |
| Output open drain | 4 x                          |
| I/O RS-232        | 1 x                          |
| Power supply      | 10 to 25 V (DC)              |
| Power consumption | 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

