



# EoSens CoaXPress-12

EoSens21CCX12-FF

## General

|                |                     |
|----------------|---------------------|
| Model          | EoSens21CCX12-FF    |
| Product code   | F006225             |
| Product series | EoSens CoaXPress-12 |
| Status         | Available           |

## Sensor

|                                |                                         |
|--------------------------------|-----------------------------------------|
| Sensor type                    | Area scan                               |
| Chroma                         | Color                                   |
| Spectrum                       | Visible                                 |
| Spectral range                 | 350 nm to 1000 nm                       |
| Resolution                     | 5,120 × 4,096 (21.00 MP)                |
| Sensor model                   | Gpixel GSPRINT4521                      |
| Sensor architecture (material) | cmos                                    |
| Shutter type(s)                | Global shutter (GS)                     |
| Sensor size                    | 23.04 × 18.43 mm (29.51 mm, Type APS-C) |
| Pixel size                     | 4.50 µm × 4.50 µm                       |

## Pixel formats

|                   |                          |
|-------------------|--------------------------|
| Sensor bit depth  | 8-bit, 10-bit, 12-bit    |
| RGB pixel formats | bayer8, bayer10, bayer12 |

## Timing and gain

|                           |                                                                                                            |
|---------------------------|------------------------------------------------------------------------------------------------------------|
| Max. frame rate           | 230 fps                                                                                                    |
| Max. frame rate ROI modes | 5120 x 4096   230 fps, 5120 x 3072   305 fps, 5120 x 1024   891 fps, 5120 x 128   5540 fps, x   12560 fps, |
| Exposure time             | 4 µs to 1 s                                                                                                |
| Gain                      | 0.0 dB to 12.0 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, 0 x Open drain output, |
| Specific non-isolated lines | 0 x RS232 input, 0 x RS232 output, 0 x RS422 input, 0 x RS422 output,                                 |
| Opto-isolated lines         | 0 x Optical isolated input, 0 x Optical isolated input,                                               |
| I/O connector               | 12-pin Hirose HR10A-10P-12S                                                                           |
| Power supply                | 12 to 24VDC                                                                                           |
| Power consumption           | External: 21 W (typical)                                                                              |

## Operating conditions

|                                 |                 |
|---------------------------------|-----------------|
| Operating temperature (housing) | -10 °C to 60 °C |
|---------------------------------|-----------------|

## Mechanical properties

|                                   |              |
|-----------------------------------|--------------|
| Body dimensions (L x W x H in mm) | 47 × 80 × 80 |
| IP class                          | IP30         |
| Lens mount(s)                     | Flat Front   |
| Weight                            | 630 g        |

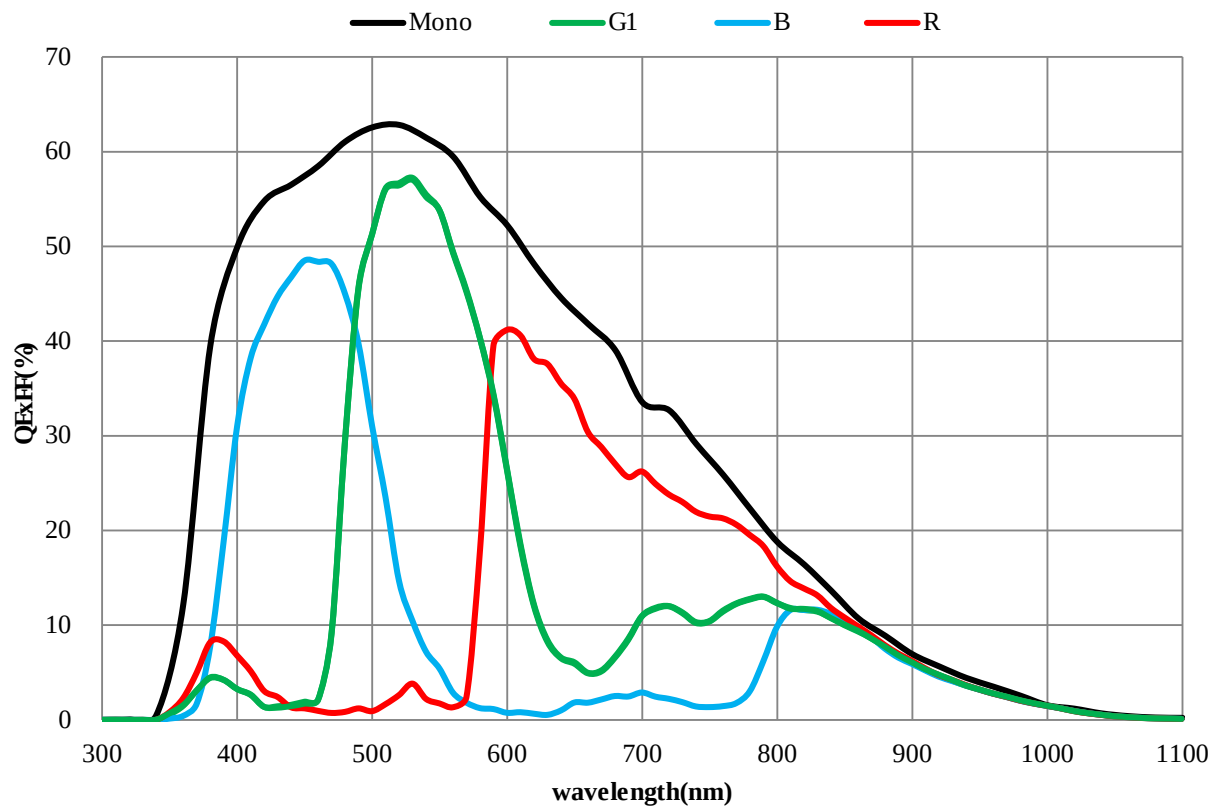
## Interfaces

|                     |                           |
|---------------------|---------------------------|
| Digital interface   | cxp-12 with 4 connections |
| Interface connector | (micro-BNC)               |
| Vision standard     | CoaXPress 2.0             |

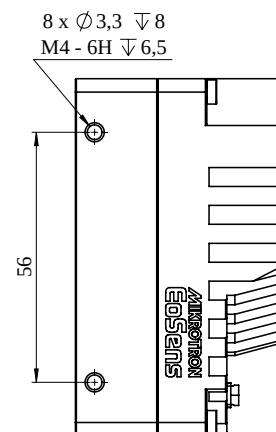
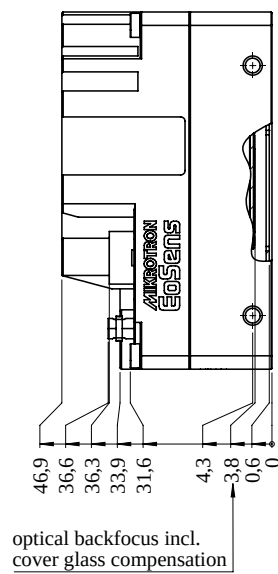
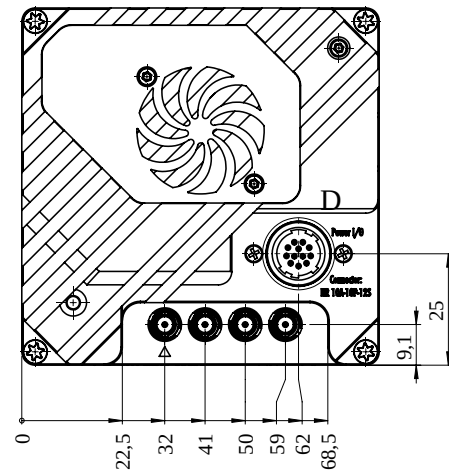
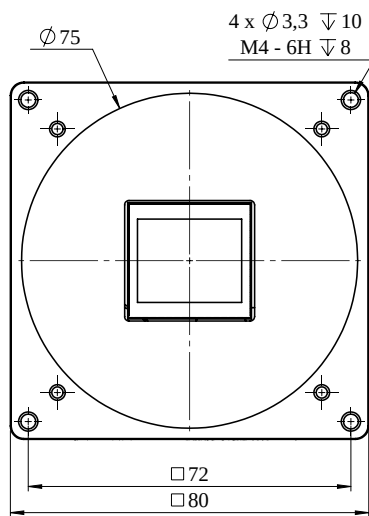
## FW features - image control

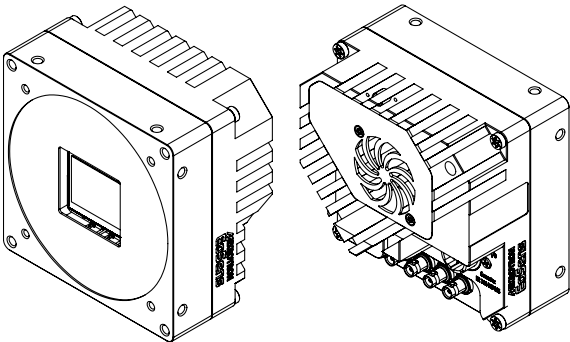
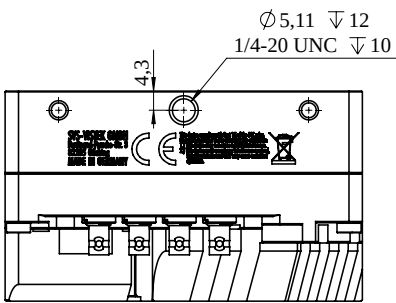
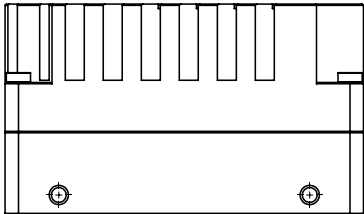
|                        |                   |
|------------------------|-------------------|
| Exposure modes         | external          |
| Gain modes             | digital, analog   |
| White balance modes    | true              |
| Image control features | roi, mirror-image |

## Quantum Efficiency

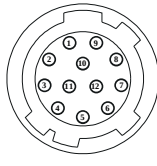


## Technical Drawing





## I/O pin assignment

|                                                                                     | Pin    | Signal             | Pin | Signal            |
|-------------------------------------------------------------------------------------|--------|--------------------|-----|-------------------|
|  | 1 + 12 | GND                | 6   | IN0               |
|                                                                                     | 2 + 11 | VCC<br>(12 - 24 V) | 7   | IO <sub>GND</sub> |
|                                                                                     | 3      | IO <sub>GND</sub>  | 8   | OUT1              |
|                                                                                     | 4      | OUT0               | 9   | IO <sub>GND</sub> |
|                                                                                     | 5      | IO <sub>GND</sub>  | 10  | IN1               |