

EoSens® 1.1 CXP

Preliminary



CoaXPress

GEN<i>i</i>CAM

Engineered for Performance

Featuring a high-speed CMOS sensor, the EoSens® 1.1 CXP offers 1,280 x 864 pixel at an outstanding speed of 2,050 fps. The camera takes advantage of CoaXPress technology, transmitting data in real time. With the new standard of CoaXPress V1.1 and V2 interface there are scalable camera versions possible to achieve highest data rates (CXP-2 interface)

High Sensitivity

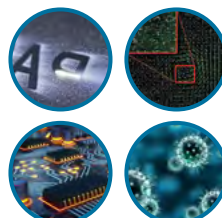
The camera's extreme sensitivity of 20V/lux*s @ 550 nm delivers high-contrast images even in very low light conditions. This allows to integrate it in applications where lighting is the crucial point.

EoSens® 1.1 CXP Key Features:

- 2,050 fps at 1.1 megapixel resolution
- Up 3,600 fps at full resolution with CoaXPress V2
- Up to 80,000 fps at reduced resolution
- Scalable camera versions with CoaXPress V1.1 and V2
- 80 x 80 x 53 mm small

APPLICATION EXAMPLES

- Melt pool monitoring
- Additive Manufacturing
- Ball grid inspection
- Sorting
- PIV measurements
- Inspection
- Roboter positioning
- Microscopy



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High-Speed Vision Solutions

Compact Design

Contained within an 80 x 80 x 53 mm in a fanless metal housing and a CoaXPress interface, the EoSens® 1.1 CXP is suited for use in a wide range of industrial applications.

Frame rates

| Resolution | Frame rate |
|----------------|-----------------|
| 1,280 x 864 px | 2,050 fps |
| 1,024 x 768 px | 2,200 fps |
| 640 x 480 px | 3,500 fps |
| 128 x 128 px | 12,584 fps |
| | Max. 80,000 fps |

Smart Features

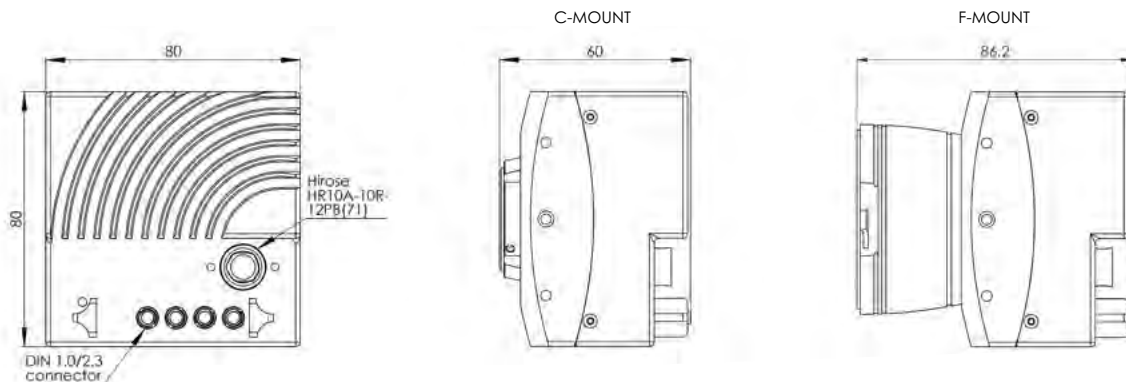
- Gamma Correction
- FPN Correction
- Noise Reduction (PRNU)
- Sequencer Function
- GPIO

Technical Data

(More detailed specifications are available on request)

| EoSens® 1.1 CXP monochrome / color | |
|---------------------------------------|------------------------------|
| Resolution | 1.1 Mpix |
| Active pixels | 1,280 x 864 px |
| Interface | CoaXPress® @ 4 x 6.25 Gbit/s |
| Frame rate (8 bit) | 2,050 fps |
| Sensor | LUX13HS |
| Sensor type | CMOS global shutter |
| Sensor format | 4/3" |
| Active sensor area (H x V) | 17.5 x 11.8 mm |
| Pixel size | 13.7 x 13.7 µm |
| Sensitivity (mono) | 20 V/lux*s @ 550 nm |
| Pixel data width | 10 / 8 bit |
| Dynamic range | 60 dB |
| Shutter time (steps) | 1 µs |
| Shutter time (range) | 2 µs – 1 s |
| Max. Trigger frequency | 300 kHz |
| Max. Jitter | ±4 ns |
| Mount options | C-Mount / F-Mount |
| Dimensions (W x H x L w/o mount) | 80 x 80 x 53 mm |
| Weight (C-Mount) | 450 g |
| Power consumption | 10 W |
| Power supply | 12 – 24 VDC |
| Camera body temperature | +5 °C ... +50 °C |
| Shock / Vibration proof | 70 g / 7 grms |
| Conformity | CE / RoHS / GenlCam |
| EMVA1288 reports | ✓ |

Camera Body Dimensions



MIKROTRON GmbH

MIKROTRON GmbH provides a full range of high-speed imaging solutions for challenging applications in industry, engineering, science and sports. The company's extreme slow-motion recording solutions enables customers to optimize manufacturing processes, improve product design, revolutionize quality management and analyze motion.

Germany

Landshuter Str. 20-22
D-85716 Unterschleissheim
Phone: +49(0)89-726342-00
E-Mail: info@mikrotron.de
Web: www.mikrotron.de

North America

14032 Hermosillo Way
US-Poway, CA 92064
Phone: +1-858-774-1176
E-Mail: steve.ferrell@mikrotron.de
Web: www.mikrotron.de



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