



# EoSens® 25CXP+

High Speed CMOS Cameras



1288  
EMWA Standard Compliant

CoaXPress

GEN<i>CAM

## EoSens® 25CXP+ Key Features:

- 80 fps at 25 megapixel resolution
- Based on OnSemi PYTHON sensor
- High-performance CoaXPress® interface
- Extremely sensitive
- Compact, fanless design

## Engineered for Sensitivity

Powered by an advanced OnSemi PYTHON sensor, the EoSens® 25CXP+ supports 80 frames per second at 5,120 x 5,120 pixel resolution.

This extremely photo-sensitive high-speed CMOS camera delivers high-contrast images even in low-light conditions.

Integrated in a robust, small, metal housing, the camera is engineered for use in rough environments. All this is combined with a 4-channel CXP-6 CoaXPress® interface, transmitting data at speeds of up to 25 Gigabits per second in real time.

## APPLICATION EXAMPLES

- PCB inspection
- Wafer inspection
- Aerial surveillance
- Surface inspection
- Flaw detection
- Materials science
- LCD panel inspection
- LED inspection



**Future Proof Interface**

The CoaXPress® interface standard is one of the most powerful transmission technologies in image processing today. Its features speak for themselves:

- Data rates up to 25Gbit/s, 4 lanes with max. 6,25Gbit/s
- Data, communication, control and power over one cable
- Real time behavior through fixed, low latency
- Precise triggering capability, even in multi-camera applications
- Plug and play

**Frame rates**

Resolution	Frame rate
5,120 x 5,120 px	80 fps
4,096 x 3,072 px	160 fps
1,920 x 1,080 px	448 fps
1,280 x 1,024 px	470 fps
1,024 x 768 px	623 fps

**Smart Features**

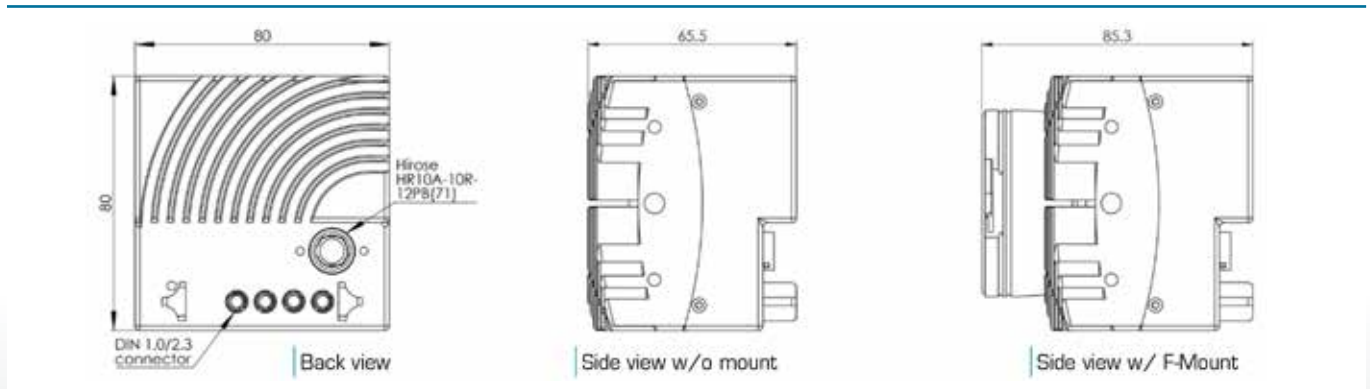
- PoCXP
- Various Trigger Modes
- Arbitrary ROI
- FPN Correction
- Direct GPIO on camera
- PRNU Correction

**Technical Data**

(More detailed specifications are available on request)

EoSens® 25CXP+ (monochrome / color)	
Resolution	25 Mpix
Active pixels	5.120 x 5.120 px
Interface	CoaXPress® @ 4 x 6.25 Gbit/s
Frame rate (8 bit)	80fps
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Sensor	OnSemi Python 25k
Sensor type	CMOS global shutter
Sensor format	35mm
Active sensor area (H x V)	23.04 x 23.04 mm
Pixel size	4.5 x 4.5 µm
Sensitivity (mono)	5.8 V/lux*s @ 550nm
Pixel data width	10 / 8 bit
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Dynamic range	59 dB
Shutter time (steps)	1 µs
Shutter time range	1 µs - 0.1 s
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Interface Connector	DIN 1.0/2.3
Mount option	F-Mount
Dimensions (W x H x L w/o mount)	80 x 80 x 66 mm
Weight (w/o mount)	540 g
Power consumption	10 W
Power supply	12-24VDC external or PoCXP
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Camera body temperature	+5 °C ... +55 °C
Shock / Vibration proof	70 g / 7 grms
Conformity	CE / RoHS / GenICam / CoaXPress®
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 enables customers to optimize manufacturing processes, improve product design, revolutionize quality management and analyze motion.

**Germany**  
 Landshuter Str. 20-22  
 D85716 Unterschleißheim  
 Phone: +49(0)89-726342-00  
 E-Mail: info@mikrotron.de  
 Web: www.mikrotron.de

**North America**  
 14032 Hermsillo Way  
 US: Poway, CA 92064  
 Phone: +1-858-774-1176  
 E-Mail: steve.ferrill@mikrotron.de  
 Web: www.mikrotron.de



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# EoSens® 12CXP+

High Speed CMOS Cameras



1288  
EMWA Standard Compliant

CoaXPRESS

GEN<i>CAM

## EoSens® 12CXP+ Key Features:

- 160 fps at 12 megapixel resolution
- Based on OnSemi PYTHON sensor
- High-performance CoaXPRESS® interface
- Extremely sensitive
- Compact, fanless design

## Engineered for Sensitivity

The EoSens® 12CXP+ is a high-speed CMOS camera, supporting 160 frames per second at full resolution of 4,096 x 3,072 pixels. Powered by an OnSemi PYTHON sensor it features FPN and PRNU correction.

The extreme photo-sensitivity of 5.8 V/lux\*s @550nm the EoSens® 12CXP+ delivers high-contrast images even in low-light conditions. Integrated in a robust, small, metal housing, the camera is engineered for use in rough environments.

All this is combined with a 4-channel CXP-6 CoaXPRESS® interface, transmitting data at speeds of up to 25 Gigabits per second in real time.

## APPLICATION EXAMPLES

- PCB inspection
- Wafer inspection
- Aerial surveillance
- Surface inspection
- Flaw detection
- Materials science
- LCD panel inspection
- LED inspection



**Future Proof Interface**

The CoaXPress® interface standard is one of the most powerful transmission technologies in image processing today. Its features speak for themselves:

- Data rates up to 25Gbit/s, 4 lanes with max. 6,25Gbit/s
- Data, communication, control and power over one cable
- Real time behavior through fixed, low latency
- Precise triggering capability, even in multi-camera applications
- Plug and play

**Frame rates**

Resolution	Frame rate
4,096 x 3,072 px	160 fps
1,920 x 1,080 px	448 fps
1,280 x 1,024 px	472 fps
1,024 x 768 px	620 fps

**Smart Features**

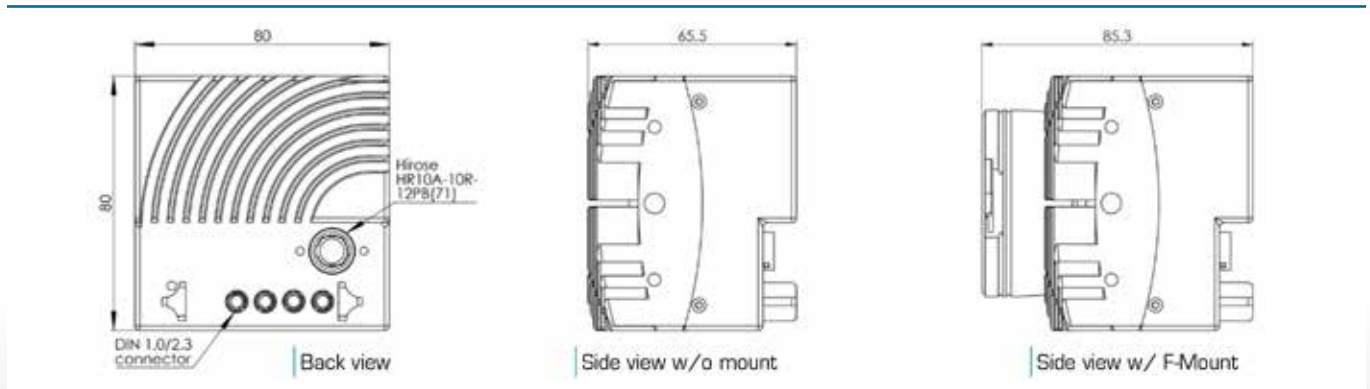
- PoCXP
- Various Trigger Modes
- Arbitrary ROI
- FPN Correction
- Direct GPIO on camera
- PRNU Correction

**Technical Data**

(More detailed specifications are available on request)

EoSens® 12CXP+ (monochrome / color)	
Resolution	12 Mpix
Active pixels	4,096 x 3,072 px
Interface	CoaXPress® @ 4 x 6.25 Gbit/s
Frame rate (8 bit)	160 fps
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Sensor	OnSemi Python 12k
Sensor type	CMOS global shutter
Sensor format	4/3"
Active sensor area (H x V)	18,43 x 13,82 mm
Pixel size	4.5 x 4.5 µm
Sensitivity (mono)	5.8 V/lux*s @ 550nm
Pixel data width	10 / 8 bit
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Dynamic range	59 dB
Shutter time (steps)	1 µs
Shutter time range	1 µs - 0.1 s
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Interface Connector	DIN 1.0/2.3
Mount option	F-Mount
Dimensions (W x H x L w/o mount)	80 x 80 x 66 mm
Weight (w/o mount)	540 g
Power consumption	10 W
Power supply	12-24VDC external or PoCXP
<hr/>	
Camera body temperature	+5 °C ... +55 °C
Shock / Vibration proof	70 g / 7 grms
Conformity	CE / RoHS / GenICam / CoaXPress®
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**North America**  
 14032 Hermosillo Way  
 US: Poway, CA 92064  
 Phone: +1-858-774-1176  
 E-Mail: steve.ferrill@mikrotron.de  
 Web: www.mikrotron.de



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