

EoSens® 25CXP

High-Speed CMOS Camera



EoSens® 25CXP Key Features:

- 80 fps at 25 megapixel resolution
- More than 6,800 fps at reduced resolution
- 1 μ s shutter time for crisp images
- High-performance CoaXPress® interface
- 80 x 80 x 66 mm small
- Fanless

1288
EMVA Standard Compliant

CoaXPress

GEN<i>CAM

Engineered for Performance

The EoSens® 25CXP is a next-generation camera engineered to meet the growing performance requirements of today's machine vision applications. Powered by an advanced 35 mm CMOS sensor, it delivers impressive 5,120 x 5,120 pixels at 80 frames per second

With an exposure time starting at 1 μ s the camera allows for crisp, blur-free images of high-speed action. 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



MIKROTRON
High-Speed Vision Solutions

Unique Design

The camera is designed for operation in high shock and vibration environments and has a robust metal housing. With its compact body, the EoSens® 25CXP can easily be set up even in tight spaces. The housing front draws heat away from the electronics, eliminating the need for a fan, and delivering quiet and vibration-free operation.

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 6.25 Gbit/s over a single coax cable
- Up to 25 Gbit/s using four cables
- Data, communication, control and power over one cable
- Real time behavior through fixed, low latency
- Precise triggering capability, even in multi-camera applications
- Flexible and reliable through use of standard coax cables
- Plug and play

Frame rates

Resolution	Frame rate
5,120 x 5,120 px	80 fps
4,096 x 3,072 px	165 fps
1,920 x 1,080 px	560 fps
1,280 x 1,024 px	590 fps
1,024 x 768 px	765 fps
	max. 6,870 fps

Smart Features

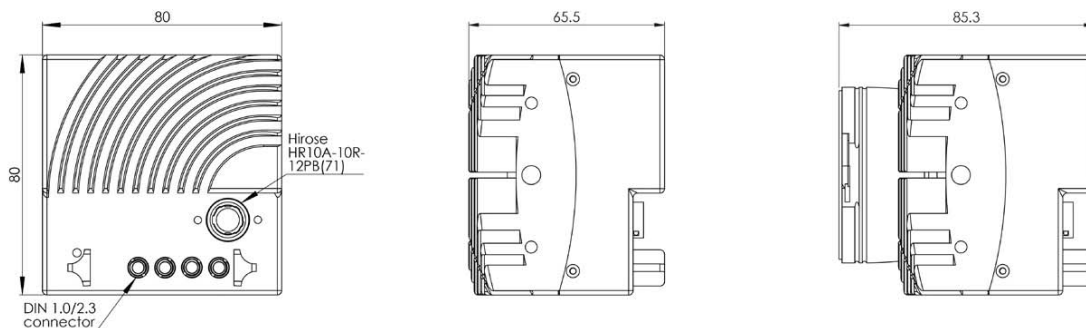
- PoCXP
- Trigger Modes
- Multiple ROI
- FPN Correction
- GPIO

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)	80 fps
Sensor	VITA 25K
Sensor type	CMOS global shutter
Sensor format	35 mm FF
Active sensor area (H x V)	23.04 x 23.04 mm
Pixel size	4.5 x 4.5 µm
Sensitivity (mono)	3.4 V/lux*s @ 550nm
Color depth	10 / 8 bit
Dynamic range	56 dB
Shutter time (steps)	1 µs
Shutter time range	1 µs – 0.25 s
Max. Trigger frequency	300 kHz
Max. Jitter	±4 ns
Connector options	DIN 1.0 / DIN 2.3
Mount options	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	12 W
Power supply	12 - 24 V DC
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.

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