Machine Vision Cameras

## EoSens® 25CXP+

High Speed CMOS Cameras



#### 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 scienceLCD 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

#### **Technical Data**

(More detailed specifications are available on request)

	Eo <i>Sens®</i> 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
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
Dynamic range	59 dB
Shutter time (steps)	1 µs
Shutter time range	1 µs - 0.1 s
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 (C-Mount)	540 g
Power consumption	12 W
Power supply	12-24VDC external or PoCXP
Camera body temperature	+5 °C +55 °C
Shock / Vibration proof	70 g / 7 grms
Conformity	CE / RoHS / GenICam / CoaXPress®
EMVA1288 reports	$\checkmark$

#### 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	472 fps
1,024 x 768 px	623 fps

#### **Smart Features**

PoCXP

Various Trigger Modes ٠

**Camera Body Dimensions** 

DIN 1.0/2.3 conn

**MIKROTRON GmbH** 

000

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 enable customers to op-

timize manufacturing processes, improve product design,

revolutionize quality management and analyze motion.

Back view

8

- Arbitrary ROI
- FPN Correction • Direct GPIO on camera
- PRNU Correction



Germany

Landshuter Str. 20-22

+49(0)89-726342-00

info@mikrotron.de

www.mikrotron.de

85716 Unterschleissheim

Side view w/o mount

North America

+1-858-774-1176

www.mikrotron.de

14032 Hermosillo Way US-Poway, CA 92064

steve.ferrell@mikrotron.de

# 85.3 Side view w/ F-Mount





All trademarks are properties of their respective owners. MIKROTRON reserves the right of change without notice. MIKROTRON is not liable for harm or damage incurred by information contained in this document.

2016 10