



SCAN ME

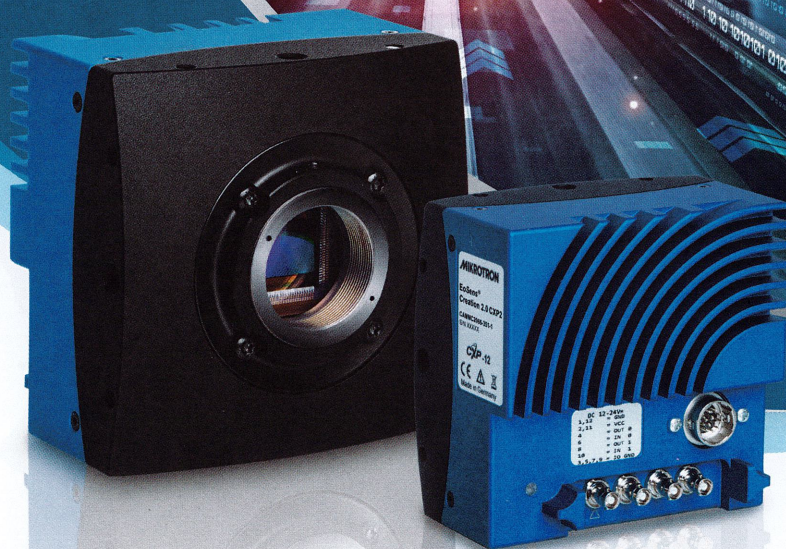


SVS-VISTEK

A BRAND OF SVS-VISTEK

**MIKROTRON**

High-Speed Vision Solutions



GEN*i*CAM

**CoaXPress**  
The next generation digital interface

**CXP-12**

# EoSens<sup>®</sup> Creation 2.0 CXP 12

## High-Speed Processing at the Edge

### EoSens<sup>®</sup> Creation 2.0 CXP 12 Key Features:

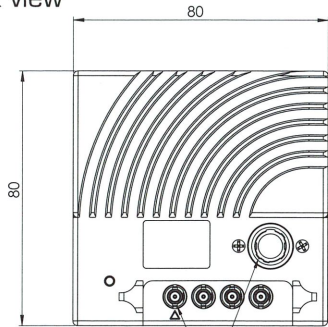
- Quick reaction time - no latency
- 2,240 fps at 2 megapixel resolution
- Scale- and switchable CoaXPress-12 interface
- High sensitivity
- Embedded capabilities for high-speed, real time processing in the camera
- 80 x 80 x 53.4 mm small



EoSens® Creation  
2.0 CXP12

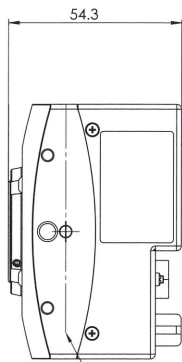
Dimensions [mm]

Back view



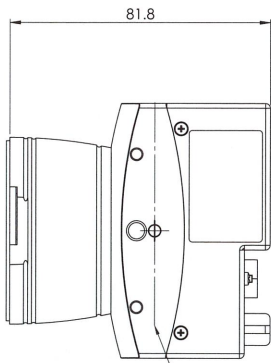
Micro BNC 75OHM ST JACK BULKHEAD      Hirose HR 10A-10R-12Pb

Side view    w/C mount



active sensor plane

Side view    w/ F mount



active sensor plane

High-Speed Imaging  
with excellent  
image quality

The EoSens® Creation 2.0CXP12 provides excellent image quality at highest data rates up to starting from full HD with more than 2,240 fps down to small ROI's with some ten thousand frames per second. The high sensitivity of the sensor and adequate pixel size guarantees best imaging results.

Processing  
Capabilities

The EoSens® Creation 2.0CXP12 is a unique camera platform, which allows to capture, process and output images with up to 2,240 fps at full resolution. With only the relevant information being transferred via the scaleable CoaXPRESS-12 interface, fewer connection links are needed to transfer data, and lower speed rates can be used per link.

Advantages of  
camera internal  
processing

- Parallelization of processing cycles
- Real time processing for large data rates up to 5 GB/s at the image source
- CoaXPRESS connections switchable 1, 2 or 4
- Link speed switchable from 3.124 up to 12.5 Gbps per connection

Resolution [px]	Frame Rates [fps]			
	capture & process	output via CXP-12 (scalable)		
		4 x CXP-12	2 x CXP-12	1 x CXP-12
1,920 x 1,080	2,247	2,247	1,123	567
1,024 x 768	3,152	2,967	2,960	1,462
640 x 480	5,020	5,020	5,020	3,736
128 x 128	18,177	18,177	18,177	18,177
1,920 x 8	170,578	170,578	86,230	43,354

Specifications	EoSens® Creation 2.0 CXP 12
Resolution	2 MP
Active pixels	1,920 x 1,080 px
Interface	CoaXPRESS-12
Sensor	LUX19HS
Sensor type	CMOS (Global Shutter)
Sensor format Ø	4/3"
Pixel size	10 x 10 µm
Sensitivity	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
FPGA type	Kintex® UltraScale™ KU035
Volatile memory	1 GB, DDR4
Usable resources in FPGA	70%
Mount options	C, F, FG mount
Dimensions w/o mount	80 x 80 x 53.4 mm
Weight w/o mount	450 g
Power consumption	11 W
Power supply	12 – 24 VDC
Camera body temp.	+5 °C ... +50 °C
Shock / vibration proof	70 g / 7 grms
Conformity	CoaXPRESS / GeniCam



GENICAM

CoaXPRESS  
The next generation digital interface

CXP-12

Markets and Application Examples

Melt pool monitoring	Additive manufacturing
Laser triangulation	Inspection
Metrology	Sorting
3D scanning	Laser tracking



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