Eo*Sens*® CL

High-Speed CMOS Camera

1288
EMVA Standard Compliant

CAMERA **Link**®

Engineered for Image Quality

The Eo*Sens*® CL brings an incredible combination of speed, resolution and dynamic range. Featuring a 1" CMOS sensor, it captures images with 1,280 x 1,024 pixel resolution at 506 frames per second. Higher frame rates are achieved by defining up to four regions of interest.

Using Camera Link® technology, the Eo*Sens*® CL is available in Full configuration. This robust high-speed interface includes camera control and I/O over one or two cables.

Compact Design

The Eo*Sens*® CL measures only 63 x 63 x 38 mm, making it easy to integrate and deploy on the factory floor. Designed for operation in high shock and vibration environments, it has a robust metal housing.

Eo*Sens*® CL Key Features:

- 506 fps at 1.3 megapixel resolution
- More than 120,000 fps with multiple and arbitrary ROIs
- Up to 90 dB dynamic range for high-contrast images
- Multiple Pixel Exposure supported
- Maximum performance on Camera Link® interface
- Full Camera Link® configuration
- 63 x 63 x 38 mm small

APPLICATION EXAMPLES

- Laser triangulation
- PIV measurements
- Roboter positioning
- Material testing
- Ballistics and explosives
- 3D inspection
- Flaw detection
- Tensile testing

MIKROTRON
High-Speed Vision Solutions

Powerful Features

Through two selectable steps, the camera's dynamic range can be enhanced to 90 dB. Even in cases of extreme contrasts between dark and light the EoSens® CL captures critical details.

Multiple slope off	Triple slope activated

Another important feature of the EoSens® CL is its automatic exposure mode. Additionally, pixel exposure can be accumulated up to seven times, resulting in alternative image results. The optimally exposed image may then be selected for further processing.

Frame rates

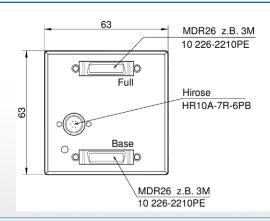| Resolution	Camera Link® Full
1,280 x 1,024 px	506 fps
640 x 480 px	1,860 fps
400 x 300 px	4,060 fps
1,280 x 64 px	7,630 fps
60 x 60 px	33,390 fps
	max. 120,420 fps

Smart Features

- Triple Slope
- FPN Correction
- Multiple ROI
- Arbitrary ROI
- High Dynamic Range
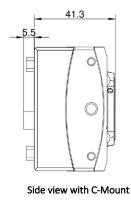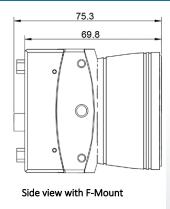- Auto Exposure
- Multiple Pixel Exposure

Technical Data
(More detailed specifications are available on request)

	EoSens® CL (monochrome / color)
Resolution	1.3 Mpix
Active pixels	1,280 x 1,024 px
Interface	Camera Link® Full
Frame rate (8 bit)	506 fps
Sensor	LUPA1300-2
Sensor type	CMOS global shutter
Sensor format	4/3'
Active sensor area (H x V)	17.92 x 14.34 mm
Pixel size	14 x 14 μm
Sensitivity (mono)	10.2 V/lux*s @ 550nm
Color depth	10 / 8 bit
Dynamic range	57 dB / up to 90 dB
Shutter time (steps)	2 μs
Shutter time range	2 μs – 1 s
Mount options	C-Mount / F-Mount
Dimensions (W x H x L w/o mount)	63 x 63 x 38 mm
Weight (C-Mount)	300 g
Power consumption	5 W
Power supply	8 – 24 V DC
Camera body temperature	+5 °C … +50 °C
Shock / Vibration proof	70 g / 7 grms
Conformity	CE / RoHS / Camera Link®
EMVA 1288 reports	✓

Camera Body Dimensions

Side view with C-Mount

Side view with F-Mount

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 enable customers to optimize manufacturing processes, improve product design, revolutionize quality management and analyze motion.

Germany
Landshuter Str. 20-22
85716 Unterschleissheim
+49(0)89-726342-00
info@mikrotron.de
www.mikrotron.de

North America
14032 Hermosillo Way
US-Poway, CA 92064
+1-858-774-1176
steve.ferrell@mikrotron.de
www.mikrotron.de

member of the TKH Group

MIKROTRON
High-Speed Vision Solutions