



# EoSens<sup>®</sup> CL

## High-Speed CMOS Camera



1288  
EMVA Standard Compliant



### EoSens<sup>®</sup> 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<sup>®</sup> interface
- Base and Full Camera Link<sup>®</sup> configuration
- 63 x 63 x 38 mm small

## Engineered for Image Quality

The EoSens<sup>®</sup> 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<sup>®</sup> technology, the EoSens<sup>®</sup> CL is available in Base and Full configuration. This robust high-speed interface includes camera control and I/O over one or two cables.

## Compact Design

The EoSens<sup>®</sup> 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.

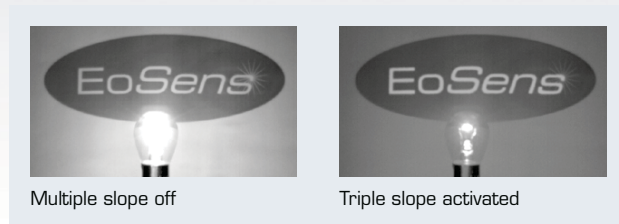
### APPLICATION EXAMPLES

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



## 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.



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	Camera Link® Base
1,280 x 1,024 px	506 fps	110 fps
640 x 480 px	1,860 fps	400 fps
400 x 300 px	4,060 fps	870 fps
1,280 x 64 px	7,630 fps	1,600 fps
60 x 60 px	33,390 fps	6,090 fps
	max. 120,420 fps	max. 15,290 fps

### Smart Features

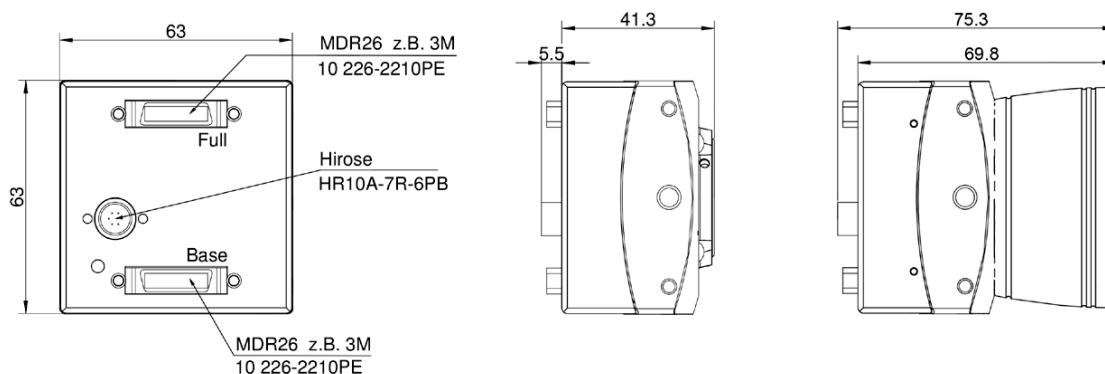
- Triple Slope
- FPN Correction
- Multiple ROI
- Arbitrary ROI
- High Dynamic Range
- Auto Exposure
- Multiple Pixel Exposure
- PoCL

## 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   Camera Link® Base
Frame rate (8 bit)	506 fps   110 fps
Sensor	LUPA1300-2
Sensor type	CMOS global shutter
Sensor format	1"
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



## 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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