

# EoSens<sup>®</sup> 3CL

## High-Speed CMOS Camera



1288  
EMVA Standard Compliant



### EoSens<sup>®</sup> 3CL Key Features:

- 285 fps at 3 megapixel resolution
- More than 180,000 fps at reduced resolution
- Maximum performance on Full Camera Link<sup>®</sup> interface
- 63 x 63 x 52 mm small
- High contrast images with 80 dB dynamic range

## Engineered for Speed

Powered by a 1" CMOS sensor, the EoSens<sup>®</sup> 3CL captures high-quality images at 1,690 x 1,710 pixel resolution and 285 frames per second. Frame rates as high as 181,000 frames per second are possible at reduced resolution.

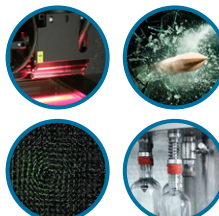
The camera is available in Full Camera Link<sup>®</sup> configuration. This high-speed serial interface transmits up to 850 Mbytes per second and includes camera control and I/O over two cables.

## Compact Design

Without lens mount the EoSens<sup>®</sup> 3CL measures only 63 x 63 x 52 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

- White light interferometry
- Laser triangulation
- PIV measurements
- Roboter positioning
- Ballistics and explosives
- 3D inspection
- Bottling inspection
- Microscopy



## Standardized Interface

The camera takes advantage of Camera Link® technology. This widely adopted standard has a number of benefits:

- High speed, high pixel depth and large image sizes
- Easy to configure camera attributes
- Triggering and timing capability
- Power and data over one cable
- Uniform cabling
- Easy handling

### Frame rates

Resolution	Frame rate
1,690 x 1,710 px	285 fps
1,280 x 1,024 px	600 fps
1,024 x 768 px	950 fps
640 x 480 px	2,320 fps
1,280 x 64 px	9,380 fps
120 x 60 px	38,500 fps
	max. 181,000 fps

### Smart Features

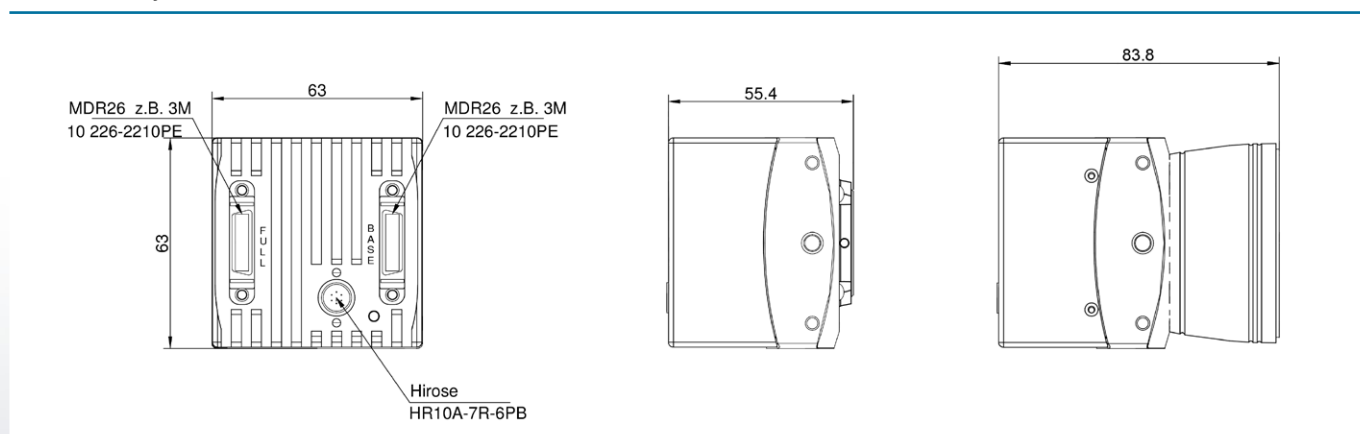
- High Dynamic Range
- Double Slope
- FPN Correction
- PoCL

## Technical Data

(More detailed specifications are available on request)

EoSens® 3CL (monochrome / color)	
Resolution	3 Mpix
Active pixels	1,690 x 1,710 px
Interface	Camera Link® Full
Frame rate (8 bit)	285 fps
Sensor	LUPA3000
Sensor type	CMOS global shutter
Sensor format	1"
Active sensor area (H x V)	13.57 x 13.68 mm
Pixel size	8 x 8 µm
Sensitivity (mono)	3.81 V/lux*s @ 550nm
Color depth	8 bit
Dynamic range	80 dB
Shutter time (steps)	1 µs
Shutter time range	1 µs – 1 s
GPIO	STRB
Mount options	C-Mount / F-Mount
Dimensions (W x H x L w/o mount)	63 x 63 x 52 mm
Weight (C-Mount)	300 g
Power consumption	7 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.

**Germany**  
 Landshuter Str. 20-22  
 D-85716 Unterschleissheim  
 Phone: +49(0)89-726342-00  
 E-Mail: info@mikrotron.de  
 Web: www.mikrotron.de

**North America**  
 14032 Hermosillo Way  
 US-Poway, CA 92064  
 Phone: +1-858-774-1176  
 E-Mail: steve.ferrell@mikrotron.de  
 Web: www.mikrotron.de

