

EoSens[®] CL

High-Speed CMOS Camera



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Advantages at a Glance:

- Maximum photo sensitivity: 2,500 ASA monochrome, 2,000 ASA RGB
- Up to 120,000 fps at reduced resolution
- Base or Full Camera Link[®] Interface with 700/160 MB/second
- Monochrome or color with BAYER-filter
- Extended Dynamic Range up to 90 dB
- Small and compact design

1.3 Megapixels at 506 fps: Maximum Light Efficiency and Speed

Maximum Photo Sensitivity

No need to worry about the light – the EoSens[®] is the first high-speed camera with a photosensitivity of 2,500 ISO/ASA. Thus EoSens[®] opens up completely new potential for high-speed inspection/monitoring. Even in low-light conditions, EoSens[®] provides high-speed images without complex lighting equipment.

Dynamic Range Adjustment of Extreme Contrasts

Through two selectable steps, the camera's Dynamic Range Adjustment option allows the user to change the CMOS sensor's linear range into a dynamic range. Consequently the EoSens[®] provides definite image details even in cases of extreme dark-light contrasts, which offers invaluable benefits for image processing.

Multiple Pixel Exposure for Indefinite Conditions

If desired, pixel exposure can be accumulated up to seven times, resulting in alternative image exposures. The optimally exposed image can be selected for further processing. In indefinite lighting conditions, as in 24-hour outdoor applications, the EoSens® becomes the high-speed camera that spots everything.

Flexible in Resolution and Speed

The EoSens® CL makes up to 506 frames per second at maximum resolution of 1,280 (H) x 1,024 (V) pixels. By freely choosing of the Region of Interest (ROI), the camera's frame rate can be increased up to 120,000 frames per second.

Multiple ROI for Choosing Several Objects

The EoSens® allows the user to simultaneously choose up to three individual ROIs within the complete frame range. Thus, multiple objects can be captured independently at the same time.

"Freeze Frame" Full-Frame Shutter

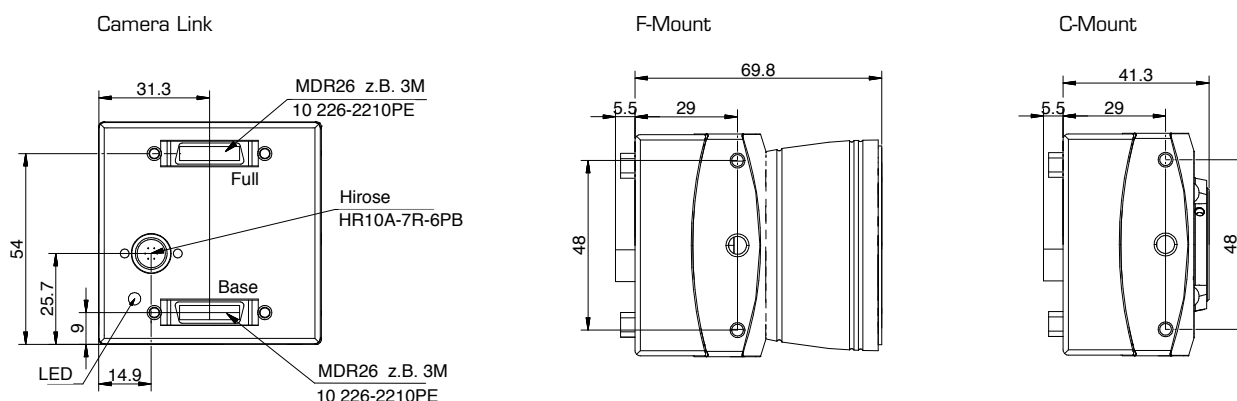
The EoSens® features a "Freeze Frame" shutter that is able to process and store a complete frame while exposing the next image. At exposure times down to 1 µs, this even enables the camera to capture fast moving objects at high definition in synchronous, free run and asynchronous triggered mode.

Technical Data

(More detailed specifications are available on request)

EoSens® CL	
Resolution	1.3 Mpix
Interface	CameraLink® full CameraLink® base
Max. Framerate (8 bit)	506 120
Sensor	CMOS global shutter
Sensor format	1"
Active Pixel	1,280 x 1,024
Pixel size	14 x 14 µm
Max. No. of ROIs	4
Speed raise will reached by	lines and columns
ASA	2,500 / 2,000
Color depth	10 bit
Dynamic Range	57 dB (up to 90 dB)
Shutter time (Steps)	2 µs
Min. Shutter speed	2 µs – 1 s
GPIO	STRB
Available mount option	C- and F-Mount
Camera size	63 x 63 x 47 mm (C-Mount)
Weight	300 g (C-Mount)
Power consumption	5 W
Camera body temperature	+5 ... 50 °C
Shock proof	70 g, 7 grms
Power supply	8 – 24 V DC
Features	ROI move Inversion mode multiple ROI

Camera Body Dimensions



MIKROTRON GmbH

MIKROTRON is a renowned manufacturer of small and robust high-speed cameras on the international industrial image processing market. Due to their outstanding performance characteristics the cameras are perfectly suited for usage in industrial and scientific applications, as well as in sports analysis, advertisements or documentaries.

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