Machine Vision Cameras

EoSens® GE

High-Speed CMOS Camera

GiGE VISION

EoSens® GE
Advantages at a Glance:

- Maximum photo sensitivity: 2,500 ASA monochrome, 2,000 ASA RGB
- Up to 80,000 fps at reduced resolution
- GigE Vision® Interface at 110 MB/second
- Monochrome or color with BAYER-filter
- Extended Dynamic Range up to 90 dB
- Small and compact design

1.3 Megapixel Resolution at 80 fps: Maximum Light Efficiency and Flexibility

Maximum Photo Sensitivity

No need to worry about the light – the EoSens® is the first high-speed camera with a photo-sensitivity of 2,500 ISO/ASA. Thus it opens up completely new potential for high-speed inspection/monitoring. Even in low-light conditions, the 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 to approach the CMOS sensor's linear range into a non-linear dynamic range. Consequently, the EoSens® provides definite image details even in cases of extreme dark-light contrasts, which means an invaluable benefit exceptionally in image processing.

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Pixel Exposure for Indefinite Lighting 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® GE transfers up to 80 frames/second at maximum resolution of 1,280 (H) x 1,024 (V) pixels. By freely choosing of the Region of Interest (ROI), frame rate can be increased up to 80,000 frames per second.

Multiple ROI for Choosing Several Objects

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

High-Speed Vision through Gigabit Ethernet

The EoSens® GE is the high-speed camera made for Gigabit Ethernet. Without costly hardware, the camera is ready-to-use with any current Gigabit Ethernet PC or notebook. The camera's GigE Vision standard enables easy connection and parametrization of camera, hardware and software.

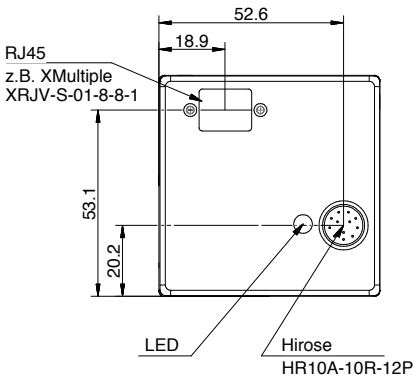
Technical Data

(More detailed specifications are available on request)

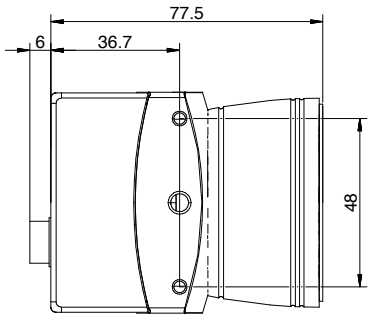
	EoSens® GE
Resolution	1.3 Mpix
Interface	GigE
Max. Framerate (8 bit)	80
Sensor	CMOS global shutter
Sensor format	1"
Active Pixel	1,280 x 1,024
Pixel size	14 x 14 µm
Max. No. of ROIs	4
Speed raise will reached by	lines and columns
ASA	2,500 / 2,000
Color depth	10 bit
Dynamic Range	57 dB (up to 90 dB)
Shutter time (Steps)	2 µs
Min. Shutter speed	2 µs – 1s
GPIO	STRB,TRIG
Available mount option	C- and F- Mount
Camera size	63 x 64.7 x 55 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	Inversion mode multiple ROI

Camera Body Dimensions

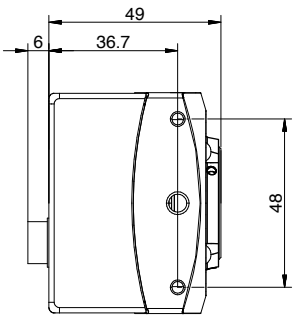
GigE



F-Mount



C-Mount



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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