EoSens® GE

High-Speed CMOS Camera

Engineered for Flexibility

The EoSens® GE brings an incredible combination of speed and resolution. Featuring a 1" CMOS sensor, it captures images with 1,280 x 1,024 pixel resolution at 81 frames per second.

The EoSens® GE takes advantage of Gigabit Ethernet technology, transmitting data over standard cables to distances of up to 100 m. The camera is ready-to-use with any current Gigabit Ethernet PC or notebook. Special hardware, such as frame grabbers, is not required. The camera's GigE Vision® standard enables you to easily connect and configure camera, hardware and software.

Compact Design

The EoSens® GE measures only 63 x 63 x 46 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.

EoSens® GE Key Features:

- 81 fps at 1.3 megapixel resolution
- More than 15,000 fps at reduced resolution
- 63 x 63 x 46 mm small
- High contrast images with 90 dB dynamic range
- GigE Vision® interface

APPLICATION EXAMPLES

- Tire testing
- Automotive safety tests
- Flaw detection
- 3D inspection

- Bottling inspection
- Fall tests
- Particle size detection
- Packaging inspection

MIKROTRON

High-Speed Vision Solutions

Powerful Features

The Eo*Sens*® GE comes with an extended feature set. It allows you to choose up to four individual ROIs within the complete frame range. Thus, you may capture multiple objects independently at the same time.

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 Eo*Sens*® GE captures critical details.

Multiple slope off	Triple slope activated
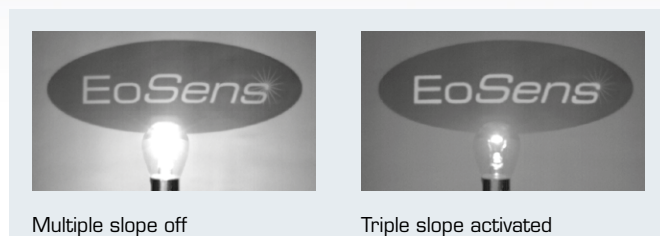
Pixel exposure can be accumulated up to seven times, resulting in alternative image results. The optimally exposed image can then be selected for further processing.

Frame rates

Resolution	Camera Link® Full
1,280 x 1,024 px	81 fps
1,024 x 768 px	130 fps
640 x 480 px	330 fps
400 x 300 px	790 fps
1,280 x 64 px	1,210 fps
60 x 60 px	6,140 fps
	max. 15,290 fps

Smart Features

- Multiple ROI
- FPN Correction
- Triple Slope
- Binning Mode

Camera Body Dimensions

Technical Data
(More detailed specifications are available on request)

	Eo*Sens*® GE (monochrome / color)
Resolution	1.3 Mpix
Active pixels	1,280 x 1,024 px
Interface	Gigabit Ethernet
Frame rate (8 bit)	81 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
Number of ROI	4
Sensitivity (mono)	10.2 V/lux*s @ 550 nm
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
GPIO	STRB / TRIG
Mount options	C-Mount / F-Mount
Dimensions (W x H x L w/o mount)	63 x 63 x 46 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 / GigE Vision® / GenICam

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XRJV-S-01-8-8-1

63

63

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49

6

83.5

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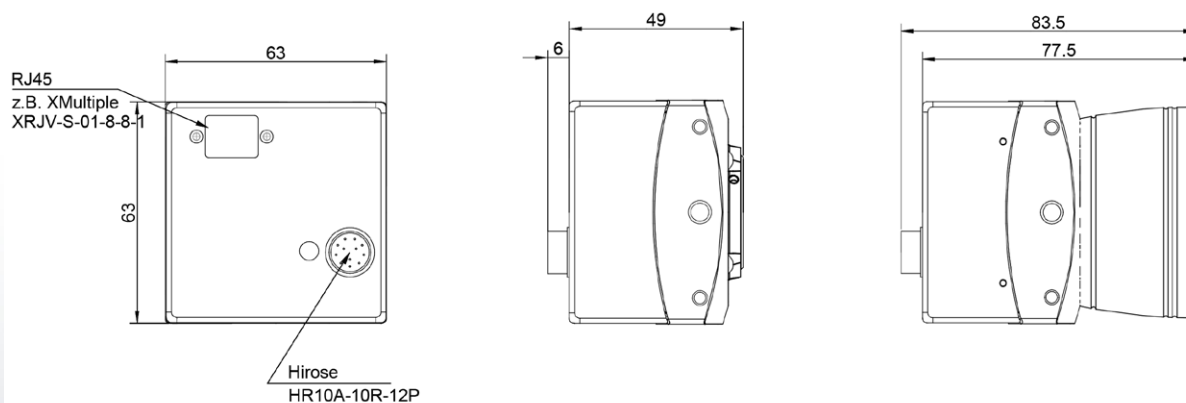
MIKROTRON GmbH

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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