



EoSens® GE

High-Speed CMOS Camera



GigE
VISION

GEN<i>i>CAM

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

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.

APPLICATION EXAMPLES

- Tire testing
- Automotive safety tests
- Flaw detection
- 3D inspection
- Bottling inspection
- Fall tests
- Particle size detection
- Packaging inspection

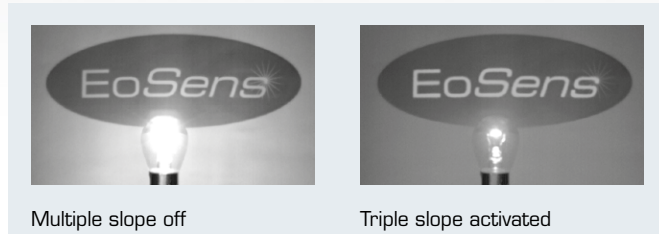


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Powerful Features

The EoSens® 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 EoSens® GE captures critical details.



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

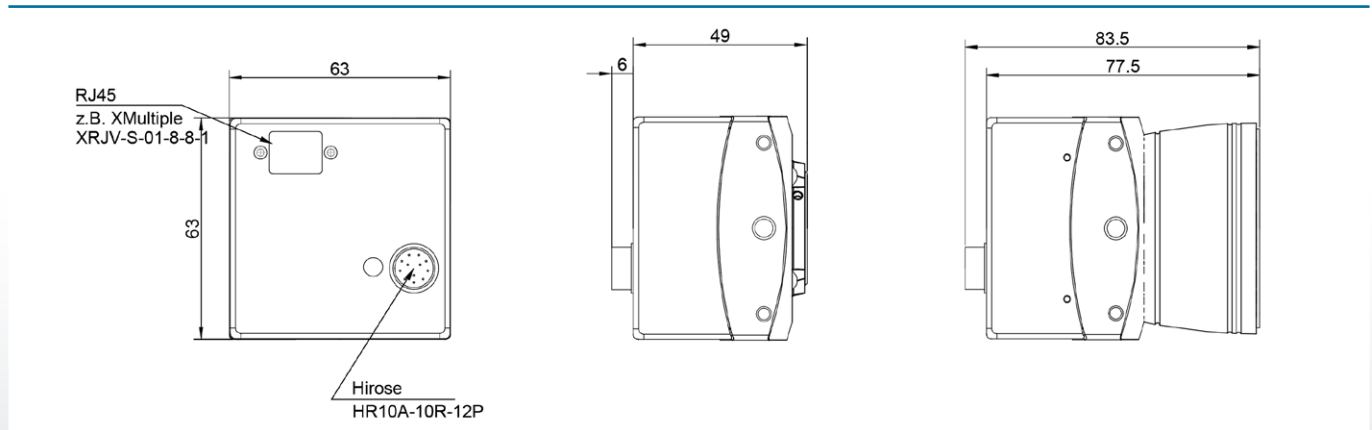
- Multiple ROI
- Triple Slope
- FPN Correction
- Binning Mode

Technical Data

(More detailed specifications are available on request)

| EoSens® 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 |

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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