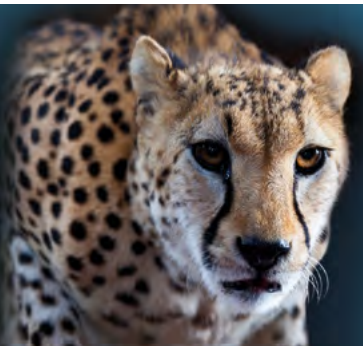


Machine Vision Cameras

EoSens® 3FIBER

High-Speed CMOS Cameras

GEN<i>CAM

EoSens® 3FIBER Key Features:

- 566 fps at 3 megapixel resolution
- Up to 225,000 fps at reduced resolution
- High-performance, integrated fiber interface
- 80 x 80 x 53 mm small

Engineered for Speed

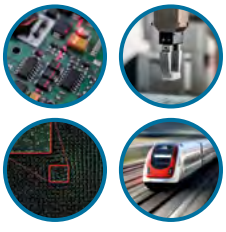
The EoSens® 3FIBER brings an incredible combination of speed, resolution and responsiveness. Operating at 566 fames per second at 1,696 x 1,710 pixel resolution, the EoSens® 3FIBER takes advantage of the integrated fiber interface.

Compact Design

Another benefit is the camera's ultra-slim design. Its size was reduced to 80 x 80 x 53 mm, allowing it to integrate easily into existing production lines, machinery or moving equipment.

APPLICATION EXAMPLES

- Laser triangulation
- Ball grid inspection
- PIV measurements
- Robot positioning
- Ballistics and explosives
- Recycling sorting
- Rail inspection
- Microscopy



MIKROTRON
High-Speed Vision Solutions

Advantage Fiber Interface

The combination of an interface protocol and a flexible, proved, high-speed fiber interface in a small high-speed camera offers many advantages for the user:

- High data rates
- Standardized fiber MTP connection
- Long distance solution with cable lengths up to 300 m
- Flexible and reliable fiber cables
- No EMC problems with fiber cables
- No extra costs for separate fiber repeater solution
- Saves system costs, e.g. with cheap fiber cables

Frame rates

Resolution	Frame rate
1,696 x 1,710 px	566 fps
1,280 x 1,024 px	1,210 fps
640 x 480 px	4,620 fps
320 x 240 px	14,900 fps
128 x 128 px	42,450 fps
	max. 225,000 fps

Smart Features

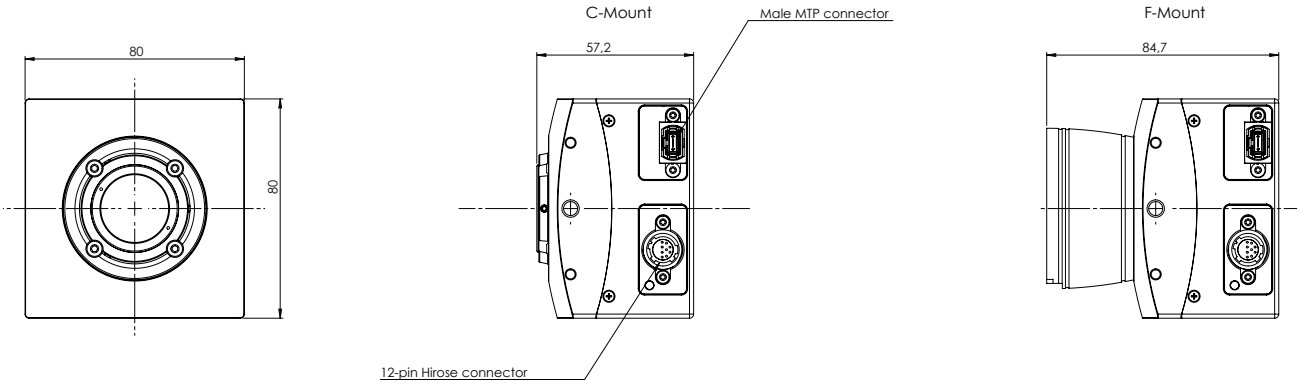
- Arbitrary ROI
- FPN Correction
- Trigger Modes
- High Dynamic Range
- GPIO

Technical Data

(More detailed specifications are available on request)

	EoSens® 3FIBER monochrome / color
Resolution	3 Mpix
Active pixels	1,696 x 1,710 px
Interface	MTP fiber interface
Frame rate (8 bit)	566 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 @ 550 nm
Pixel data width	8 bit
Dynamic range	80 dB
Shutter time (steps)	1 µs
Shutter time range	1 µs – 1 s
Max. Trigger frequency	300 kHz
Max. Jitter	±4 ns
Mount options	C-Mount / F-Mount
Dimensions (W x H x L w/o mount)	80 x 80 x 53 mm
Weight (C-Mount)	450 g
Power consumption	7 W
Power supply	12 – 24 V DC
Camera body temperature	+5 °C ... +50 °C
Shock / Vibration proof	70 g / 7 grms
Conformity	CE / RoHS / GenICam
EMVA1288 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 solutions enables customers to optimize manufacturing processes, improve product design, revolutionize quality management and analyze motion.

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High-Speed Vision Solutions

07/2020