



# EoSens® Quad1.1S



**GiG**  
VISION

EoSens

## EoSens® Quad1.1S Advantages at a Glance:

- 2.500 fps at 1.280 (H) x 864 (V) pixel resolution
- 6.400 ASA monochrome, 5000 ASA RGB light sensitivity
- Up to 5 seconds onboard Recording Memory at full resolution and speed
- Shockproof up to 100 g shock, 20 g vibration
- Burst Trigger Mode
- Multi Sequence Mode

## A New Standard in Resolution and Integration

The EoSens® Quad1.1S has been designed to meet the demands of modern high-speed cameras for all-purpose applications. The compact and lightweight housing contains a range of technical features, to meet the demands of a range of applications, such as crash tests, R&D, material strain testing or scientific tests. The combination of the resolution, high sensitivity and 10 bit pixel depth means it effortlessly records all the details of the critical moments. With a high shock resistance of 100 g it can manage highest stress for onboard crash tests.

### Onboard Ring Buffer (Pre-/Post-Trigger)

The onboard Ring Buffer allows buffering of triggered events up to 5 seconds at full resolution and speed. Freely adjustable pre or post triggered recording settings capture the events as they happen.

### ImageBLITZ® Automatic Trigger

The ImageBLITZ® Automatic Trigger allows image driven triggering directly through the camera by a user defined image region. This region can be defined and calibrated as a trigger sensor. A change in the brightness, checked in every frame, will trigger the camera.

### Maximum Performance at Minimum Form Factor

The Camera comes up with a small form factor of 65 x 65 x 120 mm (C-mount version). The lightweight body offer easy integration in all environments. Adding the analog and digital I/O it becomes an integrated part of the experiment, recording video and sensor data at the same time in total sync. The Hi-G rating in combination with the minimized weight puts less strain on the camera as well as on the mechanics required to fix them.

### Burst Trigger Mode (Post Trigger)

This Trigger Mode allows the user to divide the memory into several thousand image bursts. For every event a defined number of frames will be stored.

## New Operator Software

With the change in user experience on computers the newly developed operator Software VisualMARC faces new demands in productivity and functionality as in the work flow. The new software tackles all this, offering the user a constant workflow in high-speed images. This includes a high performance image processing pipeline and a number of more functions to meet the specific needs of high-speed camera users in various applications.

## A great variety of options

Color version, FG-Mount front, Hi-G version, ImageBLITZ® Automatic Trigger, buffer extension up to 5 seconds, Multi Sequence Mode, are optionally available.

### Standard Equipment

- F-Burst Trigger Mode
- FPN Correction
- Dynamic range adjustment
- 1,24s onboard ring buffer
- C-Mount front
- Power supply
- Operator software
- Ethernet cable 3m

### Optional Extensions

- Ring buffer extension up to 5s recording time
- ImageBLITZ® Automatic Trigger
- Hi-G 100g shock, 20g vibration
- Multi Sequence Mode
- Color version
- F-Mount front
- I/O cable

Resolution	EoSens® Quad1.1S / fps
1.280 x 864	2.500
1.280 x 720	2.990
1.024 x 768	2.800
640 x 480	4.400
512 x 512	4.140
320 x 240	8.360
128 x 128	14.400

fps = frames per second

## Technical Data

(More detailed specifications are available on request)

EoSens® Quad1.1S	
Resolution	1.280 x 864
Frame rate@max. resolution	2.500 fps
Pixel size	13.7 x 13.7 µm
Sensor size	17,5x11,8 mm
Active area	21,15 mm (diagonal)
Color depth	10 bit
Sensitivity mono/color	6.400 / 5.000 ASA
Dynamic range	69 dB
Min. Shutter speed	1 µs
Shutter time (Steps)	1 µs
Recording times for 1,280x864@2,500 fps	1,24s (4GB) ... 5s (16GB)
Available mount option	C-, F- and FG-Mount
Camera size	65 x 65 x 120mm (C-Mount)
Weight	500 g (C-Mount)
Power supply	12 - 24 V DC, Power over Ethernet (PoE+)
Camera body temperature	+5 ... 50°C
Software	VisualMARC operator software
Camera-PC interface	Gigabit Ethernet
Trigger	triggering with external signal (TTL), trigger button, software trigger or ImageBLITZ® Automatic Trigger
Synchronisation	in- and output to synchronize multiple cameras or sync any external devices (5V TTL), ARM output (recording state)
Analog input	2
Digital input	4
Data Interface	Gigabit Ethernet
Plug position	Rear side placed
Features	FPN Correction, Burst Trigger Mode

## 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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