

3 Megapixel Resolution - for detailed images

- **Extremely flexible in resolution and speed**
- **3 Megapixel resolution up to 523 frames per second at 1,696 (H) x 1,710 (V) pixel resolution**
- **Stepless adjustable frame rate up to 285,000 frames per second at reduced resolution**
- **Maximum photo sensitivity: 1,200 ASA monochrome, 1,000 ASA RGB**
- **1.5 seconds onboard Recording Memory at full resolution and speed**
- **GigE Vision® compatible**
- **Crashproof up to 100 g**
- **pixel-based Fixed Pattern Noise Correction**
- **Burst Trigger Mode**
- **Multi Sequence Mode**

Extremely flexible in resolution and speed

The MotionBLITZ EoSens® mini2 meets the requirements for most varied applications, because resolution and speed are variable adjustable. A resolution of 1,696 (H) x 1,710 (V) pixels ensures superb image quality with razor-sharp images. With the proven Mikrotron High-Speed technology the camera takes up to 285,000 frames per second.

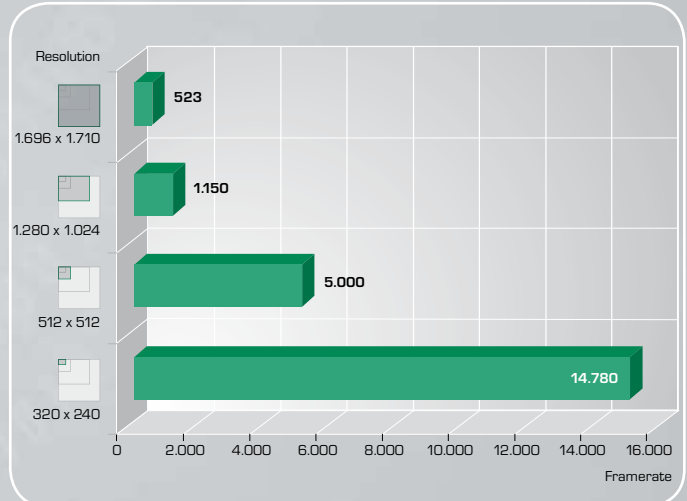
Maximum performance at minimum form factor

MotionBLITZ EoSens® mini2 comes up with a small form factor. A housing depth of appx. 63 mm (C-Mount Version) allows universal using, even in cramped space conditions.

ImageBLITZ® Auto Trigger

The ImageBLITZ® Auto Trigger allows objectdriven triggering directly through the camera by a selectable image region defined as sensor. A free selectable rectangle can be adjusted as trigger sensor. If there is a change in the lightness (on single frame level), the camera will trigger automatically.

GigE
VISION



Dynamic Range Adjustment for extreme contrasts

The camera's Dynamic Range Adjustment option allows to change the CMOS sensor's linear range into a non-linear one. Thus, MotionBLITZ EoSens® mini2 provides clear details even at extreme dark/light contrasts.

Flexible and easy use

The camera's Gigabit Ethernet® interface even allows to operate multiple cameras from any standard Notebook/PC over a distance of 100 m.

Triggered onboard recording with history function

The MotionBLITZ EoSens® mini2 onboard ring buffer allows buffering of triggered events up to 1.5 seconds at full resolution and speed. The history function allows pre and post event recording through free selection of frames or recording time. The recording time can be doubled by compression



MotionBLITZ EoSens® mini2

High-Speed Recording Camera

Burst Trigger Mode (post Trigger)

In Burst Trigger mode, it is possible to divide the memory into several thousand sequences. Events can be recorded over a longer period without the data having to be read out between.

Fixed Pattern Noise Correction

MotionBLITZ EoSens® mini2 adjusts every single pixel regarding blackvalue and dynamic in real time. In consequence one gains low noise and crystal clear pictures.

| Technical Data | |
|--------------------|--|
| Sensor | CMOS sensor 1,696 (H) x 1,710 (V) pixel active area 19.27 mm (diagonal) 13.57 (H) x 13.68 (V) mm 8-bit monochrome or RGB-color with BAYER-filter |
| Pixel size | 8 x 8 µm |
| Light sensitivity | 1,200 ASA monochrome, 1,000 ASA color |
| Image speed | 1 - 523 fps* at full 1,696 (H) x 1,710 (V) resolution. Up to 285,000 fps at reduced resolution |
| Recording time | 1.5 s at full resolution or 523 fps. Extended recording times at reduced resolution and/or image speed |
| Compression | double recording time through reduction of color depth to 4-bit = 16 greysteps |
| Shutter | global electronic shutter from 2 µs to 1 s, in 2 µs steps |
| Internal dynamics | up to 90 dB using dynamic shutter control |
| Spectral bandwidth | 400-900 nm |
| Amplification | Digital Gain 1, 1.5 & 2 |
| System design | scaleable and network-compatible with standard- or Notebook PCs Synchronous processing of multiple cameras |
| Camera size | 63 x 63 x 64.5 mm (C-Mount) 63 x 63 x 92.5 mm (F-Mount) |
| Weight | 280 g, without lens |
| Environment | +5 ... 35 °C (without cooling option) +5 ... 45 °C (with cooling option) |
| Lens mount | C-Mount or F-Mount |
| Power supply | 10 - 30 V DC external power supply, or from internal battery |
| Power consumption | 7.5 W max. |
| Software | MotionBLITZ® Director2 operator software for Windows 2000/XP/Vista |

| Technical Data | |
|---------------------|---|
| Frame storage | BMP-, TIF-, DNG, JPG- or AVI file format |
| Camera-PC interface | 1000/100 Ethernet Interface (Gigabit Ethernet) |
| Trigger | Triggering with external Signal, MotionBLITZ® Director2 Software or ImageBLITZ® |
| Synchronisation | Synchronisation in- and output to synchronise e.g. multiple cameras (5V TTL) |
| Plug position | Models: alternative rearside- or side places connectors |

| Standard Equipment |
|---|
| Burst Trigger Mode · Fixed Pattern Noise Correction Dynamic Range Adjustment · compression 1.5 s onboard Ring Buffer · rearside placed connectors C-Mount Front · power supply · operator software |

| Optional Extensions | | | | |
|--------------------------------|-----------------------------|---------------------------------|---|--------------------------------|
| Cooling Option +5 ... 45 °C | ImageBLITZ® Auto Trigger | Multi- sequence recording | Hi-G 100 g Shock 100 g/25 msec Vibration 10 g | IRIG B Synchroni- sation |

| Recording Data | | | |
|-----------------------|------------|-------------------|------------|
| resolution | frame rate | resolution | frame rate |
| 1,696 (H) x 1,710 (V) | 523 fps | 640 (H) x 480 (V) | 4,450 fps |
| 1,280 (H) x 1,024 (V) | 1,150 fps | 512 (H) x 512 (V) | 5,000 fps |
| 1,280 (H) x 720 (V) | 1,633 fps | 320 (H) x 240 (V) | 14,780 fps |
| 1,000 (H) x 1,000 (V) | 1,438 fps | 100 (H) x 100 (V) | 54,279 fps |

* fps = frames per second

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