3 Megapixel High Definition – for detailed images

- **Extremely flexible in resolution and speed:**
  3 Megapixel resolution up to 523 frames per second at 1,696 x 1,710 pixel resolution
- **Stepless adjustable frame rate up to more than 200,000 frames per second at reduced resolution**
- **Maximum photo sensitivity:**
  1,200 ASA monochrome, 1,000 ASA RGB
- **3 seconds onboard Recording Memory at full resolution and full speed**
- **GigE Vision® compatible**
- **ImageBLITZ® Automatic Trigger**
- **Crashproof up to 100 g shock, 10 g vibration**
- **Pixel based Fixed Pattern Noise Correction**
- **Burst Trigger Mode**
- **Multi Sequence Mode**

GiGE
VISION™

Extremely flexible in resolution and speed

The MotionBLITZ Eo*Sens*® mini2 meets the requirements for most varied applications, because resolution and speed are variable adjustable. A resolution of 1,696 x 1,710 pixels ensures superb image quality with extremely sharp images. With the proven Mikrotron high-speed technology the camera takes up to more than 200,000 frames per second.

Fixed Pattern Noise Correction

Every single pixel is adjusted regarding blackvalue and dynamic, in real time. The benefits are low noise and crystal clear pictures.

Onboard Ring Buffer (pre/post Trigger)

The onboard Ring Buffer allows buffering of triggered events up to 3 seconds at full resolution and full speed. Free adjustable pre or post triggered recording time.

ImageBLITZ® Automatic Trigger

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

Burst Trigger Mode (post Trigger)

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

Dynamic Range Adjustment

The camera's Dynamic Range Adjustment feature allows to change the CMOS sensor's linear transfer characteristic into a non-linear one. Thus, the camera provides clear details even at extreme dark/light contrasts.

Maximum performance at minimum form factor

MotionBLITZ Eo*Sens*® mini2 comes up with a small form factor. This ultra compact housing with a depth of approx. 63 mm (C-Mount version) allows universal using, even in cramped space conditions.

Flexible and easy use

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

A great variety of extensions

Color version, F-Mount front, ImageBLITZ® Automatic Trigger, Multi Sequence Mode, side placed connectors, cooling option and Hi-G version are optional available.

Special Electronics
Digital Slow Motion
Image Processing **MIKROTRON**

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 with micro lenses
Light sensitivity	1,200 ASA monochrome, 1,000 ASA RGB-color, monochrome 25 V/lux-s
Image speed	1–523 fps* at full resolution, up to more than 200,000 fps at reduced resolution
Recording time	– 3 s at full resolution and full speed – extended recording times at reduced resolution and/or frame rate
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
Sensor dynamic	up to 80 dB using Dynamic Range Adjustment
Spectral bandwidth	400–900 nm
Amplification	Digital Gain 1, 1.5 & 2
System design	– scaleable and network-compatible with standard PCs or Notebooks – synchronous processing of multiple cameras
Camera size	63 x 63 x 64.5 mm (C-Mount) 63 x 63 x 94 mm (F-Mount)
Weight	280 g, without lens
Camera body temperature	+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
Power consumption	7.5 W max.
Software	MotionBLITZ® Director2 operator software for Windows® 7/XP
Frame storage	BMP, JPG, TIFF, AVI, DNG, PNG and REC (Mikrotron proprietary raw) file format
Camera-PC interface	Gigabit Ethernet interface
Trigger	triggering with external signal/switch, MotionBLITZ® Director2 software or ImageBLITZ® Automatic Trigger
Synchronisation	– in- and output to synchronise multiple cameras or trigger any external devices (5V TTL) – alternative ARM output (recording state)
Plug position	rearside, optional side placed

Standard Equipment

Burst Trigger Mode · Fixed Pattern Noise Correction Dynamic Range Adjustment · compression · 1.5 s onboard Ring Buffer C-Mount front · rearside placed connectors · power supply operator software · Ethernet cable 3 m

Optional Extensions

Ring Buffer extension up to 3 s recording time at full resolution and full speed · Color version · F-Mount front · ImageBLITZ® Automatic Trigger Multi Sequence Mode · side placed connectors · cooling option +5…45 °C Hi-G 100 g shock, 10 g vibration

Recording Data

Resolution	Frame Rate	Resolution	Frame Rate
1,696 (H) x 1,710 (V)	523 fps	640 (H) x 480 (V)	4,465 fps
1,280 (H) x 1,024 (V)	1,155 fps	512 (H) x 512 (V)	5,015 fps
1,280 (H) x 720 (V)	1,640 fps	320 (H) x 240 (V)	14,775 fps
1,024 (H) x 1,024 (V)	1,410 fps	128 (H) x 128 (V)	43,540 fps

* fps = frames per second

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Revision L/IX

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