



MotionBLITZ® CVR

Compact Versatile Recorder



MotionBLITZ® CVR Advantages at a Glance:

- Extremely flexible in resolution and speed:
4 Megapixel resolution up to 560 fps
- Full HD: 1,920 (H) × 1,080 (V) at 900 fps
- Adjustable Region of Interest (RoI)
- Stepless adjustable frame rate up to 35,000 fps at reduced resolution
- Maximum photo sensitivity: 3,200 ASA monochrome, 2,400 ASA RGB
- Up to 12 seconds Recording Memory at full resolution and speed
- Lossless recording
- Monochrome or color with BAYER-filter
- Small and compact design
- C-Mount or F-Mount lens mount
- Burst Trigger Mode
- Windows® 7 64-bit based Director2 operator software
- Image storage in multiple common formats

Compact Recording System for Flexible Use

Extremely Flexible in Resolution and Speed

The MotionBLITZ® CVR offers the features for most varied applications. Resolution and speed can be user defined as needed. 2,336 × 1,728 pixels deliver superb image quality with an outstanding level of details. Based on MIKROTRON high-speed technology the camera takes up to 35,000 frames per second to frame-freeze any action.

Being Ready – Faster Than Ever

The recording station provides not only camera control and buffer memory but also an extremely fast video download to the internal storage space. In less than four minutes the complete video buffer is written to the RAID and the system is ready for more action.

Maximum Performance at Minimum Form Factor

The camera head of the MotionBLITZ® CVR comes up with a small form factor. The small footprint of approx. 80 x 53 mm (C-Mount version) allows an easy handling, even in cramped conditions while the recording station can be up to 20 m away. The recording station is equally compact with 44 x 35 x 24 cm.

Onboard Ring Buffer (Pre-/Post-Trigger)

The onboard Ring Buffer allows buffering of triggered events up to 12 seconds at full resolution and full 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 image area can be defined and calibrated as trigger sensor. A change in the brightness, checked in every frame, will trigger the LTR or record an event.

Standard Equipment

- Recording station
- 4 MP camera (EoSens® 4CXP)
- 12.0 s onboard Ring Buffer
- 2 TB storage capacity
- Burst Trigger Mode
- FPN Correction
- C-Mount front
- Memory Standby Mode
- operator software
- CoaXPress cable 5 m
- Multi interface board

Optional Extensions

- ImageBLITZ® Automatic Trigger
- Color version
- F-Mount front
- 10/20 m cable
- Multi Sequence Mode
- No-Moving Parts

MotionBLITZ® Director2 Software Features

- Set-up assistance with life images
- Record and trigger settings
- View and edit functions
- Image correction
- Marker and comment functions
- Freely adjustable grid
- Export in different formats
- Image data attached to each frame
- Multi-sequence recording, external triggered
- Multiple sync and trigger options

Technical Data

(More detailed specifications are available on request)

	MotionBLITZ® CVR
Sensor	CMOS sensor 2,336 (H) x 1,728 (V) pixel Active area 20.34 mm (diagonal) 16.35 (H) x 12.10 (V) mm, 8-bit monochrome or RGB-color with BAYER-filter
Pixel size	7 x 7 µm with micro lenses
Light sensitivity	3,200 ASA monochrome, 2,400 ASA RGB-color, monochrome 11 V/lux-s
Image speed	1 – 560 fps at full 2,336 (H) x 1,728 (V) resolution, up to 35,000 fps at reduced resolution
Recording time	12.0 s at full resolution and full speed extended recording times at reduced resolution and/or frame rate
Shutter	global electronic shutter from 2 µs to 1 s, in 2 µs steps
Spectral bandwidth	350 – 850 nm
Amplification	Digital Gain 1 – 4 (8-bit modes)
Camera size	80 x 80 x 53 mm (C-Mount) 80 x 80 x 81 mm (F-Mount)
Camera weight	450 g, (C-mount) without lens
Recording station	36 x 36 x 15 cm
Temperature	+5 ... 50 °C (ambient)
Lens mount	C-Mount or F-Mount
Power supply	100 – 240 V, 50 – 60 Hz
Power consumption	250 W max.
Software	MotionBLITZ® Director2 operator software for Windows® 7 / XP 64-bit
Frame storage	BMP, JPG, TIFF, AVI, DNG, PNG and REC (MIKROTRON proprietary raw) file format
Camera-PC interface	CoaXPress®
Trigger	triggering with external signal (TTL), internal switch, software trigger or ImageBLITZ® Automatic Trigger
Synchronisation	in- and output to synchronize multiple systems or trigger any external devices (5V TTL) alternative ARM output (recording state)
Digital input	8 channels with optocouplers (TLL), inserted in each image

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 enable customers to optimize manufacturing processes, improve product design, revolutionize quality management and analyze motion.

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