



MotionBLITZ® CVR

Compact Versatile Recorder



MotionBLITZ® CVR advantages at a glance:

- Extremely flexible in resolution and speed:
4 Megapixel resolution up to 560 fps
at 2,336 (H) x 1,728 (V) pixel resolution
- Full HD: 1,920 (H) x 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 BMP, JPG, TIFF,
AVI, DNG, PNG and DAT file format



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 x 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 freeze any action.

Being ready – faster than ever

The recording station provides not only camera control and buffer memory but also an extremely fast RAM download to the internal RAID system. 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)
- 2 TB storage capacity
- Burst Trigger Mode
- FPN Correction
- 12.0 s onboard Ring Buffer
- 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 live images
- Record and trigger setting
- View and edit functions
- Image correction
- Marker and comment functions
- Freely adjustable grid
- Export in different formats
- Image data export attached with 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	44 x 35 x 24 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 is a renowned manufacturer of small and robust high-speed cameras on the international industrial image processing market. Due to their outstanding performance characteristics the cameras are perfectly suited for usage in industrial and scientific applications, as well as in sports analysis, advertisements or documentaries.

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