



MotionBLITZ® LTR Series

Long Time Recording Systems



MotionBLITZ® LTR Series Advantages at a Glance:

- Fully integrated high-speed recording system
- Adjustable frame rate up to 35,000 fps
- Up to several hours of recording time
- Remote head for easy placement
- All video securely stored for immediate access

MotionBLITZ® Director2 Software Features:

- Flexible and easy to use
- Direct access to all camera features
- Extensive marker and comment functions
- Multiple export options to stills and video formats
- ImageBLITZ® Automatic Trigger
- I/O management for trigger and marker
- Image processing functions

Continuous Monitoring for Optimizing Procedures

For capturing multiple events and analyze changes over a longer period of time, the long time recorders of the MIKROTRON MotionBLITZ® LTR series allow detailed insights into fast processes – not only for a couple of seconds, but also for several hours. Long-term processes, whole series of tests and unexpected events or very fast successive single events can be recorded in their entirety at full resolution.

The unique combination of high speed and long time recording provides a tremendous amount of data for further analysis. The recorded images are stored directly on a RAID protected drive array, therefore eliminating any download times. All material is immediately available for further processing after the recording has finished.

FIELDS OF APPLICATION

Application examples

- Missile tracking
- Shake table studies
- Tire testing
- Material strain testing
- Machine optimization
- Scientific tests
- Animal studies
- Sports



Tasks at a glance

- Process monitoring
- Trouble shooting
- Rapid event capturing
- Sport analyses
- Long time analyses



Technical Data

(More detailed specifications are available on request)

	MotionBLITZ® LTR1.3		
	Portable (PSF)	Desktop (SSF)	Tower (SBF)
Camera	EoSens® CL (MC1362) (monochrome)		
Image speed	Up to 506 frames per second at 1,280 (H) x 1,024 (V) pixels resolution, (8-bit)		
Light sensitivity	2,500 ASA monochrome, 2,000 ASA RGB		
Lens mount	C-Mount		
Digital input	8 channels with optocouplers (TTL)		
Synchronisation	in- and output to synchronize multiple systems or trigger any external devices (5V TTL) alternative ARM output (recording state)		
Power supply	100 – 240 V, 50 – 60 Hz		
Camera body temperature	+5 ... 35 °C		
Camera-PC interface	Full CameraLink®		
Camera size	63 x 63 x 47 mm (C-Mount), 63 x 63 x 74 mm (F-Mount)		
	DVD-writer, USB 3.0, eSATA, Gigabit Ethernet interfaces		
Recording times			
23 min	-	S	-
46 min	S	O	-
90 min	O	-	-
110 min	O	-	S
130 min	O	-	-
220 min	-	-	O
440 min	-	-	O
Camera cable lengths			
5 m	S	S	S
10 m	O	O	O
Optional extensions			
EoSens® CL color (MC1363)	O	O	O
F-Mount	O	O	O
ImageBLITZ® Automatic Trigger	O	O	O
IRIG B	O	-	O
Non moving parts	O	O	-
Control unit size	44 x 35 x 24 cm	36 x 36 x 16 cm	65 x 23 x 45 cm
Control unit weight	17 kg	11 kg	32 kg
Display size	17"	-	-
Resolution and corresponding frame rate			
1,280 x 1,024	506 fps		
1,280 x 720	710 fps		
1,024 x 768	800 fps		
800 x 600	1,250 fps		
640 x 480	1,860 fps		
480 x 320	3,430 fps		
320 x 240	5,670 fps		
160 x 100	17,600 fps		

S = Standard; O = Optional; - = not available; fps = frames per second

Technical Data

(More detailed specifications are available on request)

MotionBLITZ® LTR3.0 Portable (PSF)	
Camera	EoSens® 3CXP (MC3082) (monochrome)
Image speed	Up to 560 frames per second at 1,696 (H) x 1,710 (V) pixels resolution, (8-bit)
Light sensitivity	1,200 ASA monochrome, 1,000 ASA RGB
Lens mount	C-Mount
Digital input	4 channels with optocouplers (TTL)
Synchronisation	in- and output to synchronize multiple systems or trigger any external devices (5V TTL) alternative ARM output (recording state)
Power supply	100 – 240 V, 50 – 60 Hz
Operating temperature	+5 ... 35 °C
Camera-PC interface	CoaXPress®
Camera size	80 x 80 x 53 mm (C-Mount), 80 x 80 x 80 mm (F-Mount)
DVD-writer, USB 3.0, eSATA, Gigabit Ethernet interfaces	
Recording times	
30 min	S
45 min	0
60 min	0
Camera cable lengths	
5 m	S
10 m	0
Optional extensions	
EoSens® 3CXP (MC3083) (color)	0
F-Mount	0
ImageBLITZ® Automatic Trigger	0
Non moving parts	0
Control unit size	44 x 35 x 24 cm
Control unit weight	17 kg
Display size	17"
Resolution and corresponding frame rate	
1,696 x 1,710	560 fps
1,696 x 954	1,010 fps
1,280 x 1,024	1,210 fps
1,280 x 720	1,720 fps
1,024 x 768	1,960 fps
800 x 600	3,090 fps
640 x 480	4,620 fps
480 x 320	8,550 fps
320 x 240	14,900 fps

S = Standard; 0 = Optional; - = not available; fps = frames per second

Technical Data

(More detailed specifications are available on request)

MotionBLITZ® LTR4.0 Portable (PSF)	
Camera	EoSens® 4CXP (MC4082) (monochrome)
Image speed	Up to 560 frames per second at 2,336 (H) x 1,728 (V) pixels resolution, (8-bit)
Light sensitivity	3,200 ASA monochrome, 2,400 ASA RGB
Lens mount	C-Mount
Digital input	4 channels with optocouplers (TTL)
Synchronisation	in- and output to synchronize multiple systems or trigger any external devices (5V TTL) alternative ARM output (recording state)
Power supply	100 – 240 V, 50 – 60 Hz
Operating temperature	+5 ... 35 °C
Camera-PC interface	CoaXPress®
Camera size	80 x 80 x 53 mm (C-Mount), 80 x 80 x 80 mm (F-Mount)
DVD-writer, USB 3.0, eSATA, Gigabit Ethernet interfaces	
Recording times	
20 min	S
30 min	O
40 min	O
Camera cable lengths	
5 m	S
10 m	O
Optional extensions	
EoSens® 4CXP (MC4083) (color)	O
F-Mount	O
ImageBLITZ® Automatic Trigger	O
Non moving parts	O
Control unit size	44 x 35 x 24 cm
Control unit weight	17 kg
Display size	17"
Resolution and corresponding frame rate	
2,336 x 1,728	560 fps
2,336 x 1,314	740 fps
2,336 x 864	1,120 fps
2,336 x 432	2,240 fps
1,920 x 1,080	900 fps
1,280 x 720	1,340 fps
1,024 x 768	1,260 fps
800 x 600	1,610 fps
640 x 480	2,020 fps
480 x 320	3,020 fps

S = Standard; O = Optional; - = not available; fps = frames per second

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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