MotionBLITZ® Cube3

Ultra-Sensitive High Speed Buffer Camera

Faster and Brighter

One thing was too often true in High Speed Video: 'There's never enough light.'
MotionBLITZ® Cube3 ends that truth. With an innovative, high sensitive 512(H) x 512(V) CMOS image sensor that even runs faster. That means less light necessary for helpful images, better depth of field, and clear high speed recordings where other cameras see nothing but shadows.

- **Monitoring of Engine and Process Dynamics**
- **Load and Resonance Analysis**
- **Material and Crash Test, Quality Assurance**
- **Explosion and Ballistic Studies**
- **Preventive and Reactive Maintenance**
- **Fluid Processes**
- **Motion Analysis in Medicine, Sports, Ergonomy, Biology**

Pre and Post Imaging: the Cube3 Ring Buffer

An internal ring buffer allows recording of a triggered event's history and progress. Images are recorded continuously, until stopped by trigger signal. Pre and post images of up to 16 events are buffered in the camera memory for further analysis. Time lengths are selectable up to 3 or 6 seconds altogether (dependent on model type).

Cube3 Recognizes the Event: ImageBLITZ® Self-Trigger

For event-driven self-triggered imaging, normally complex sensor technology is obligatory. ImageBLITZ® is a camera-internal self-triggering feature that enables to define a selectable area within the Region of Interest (RoI) as "sensor". Image recording is triggered in real-time by variation of brightness within the specified sector. The ImageBLITZ® self-trigger allows configuration by minimal effort on intuitive interface. Photoelectric relays and synchronizing to clock rate are not necessary (however, applicable).

Compact, Portable and Ready-to-Use

Any existing Gigabit Ethernet LAN can be used to connect MotionBLITZ® Cube3 to a standard PC or notebook. Also, operating of multiple cameras simultaneously from one or more stations is possible. The compact size of the camera, as well as the internal battery backup, make MotionBLITZ® Cube ideal for mobile and standalone use. Mikrotron's user-friendly, Windows-based recording software, MotionBLITZ® Director is quick to install and easy to operate. Just one click gives you a live image for adjustment, or starts recording while you monitor the object on screen.

- **Photo sensivity acc. to 2.000 / 800ASA**
- **Up to 2.500 fps* at 512 x 512 resolution**
  Up to 120.000 fps* at reduced resolution
- **CMOS sensor with selectable resolution (RoI)**
- **Recording time up to 3 / 6s at max. resolution**
- **Internal battery set for standalone operation**
- **ImageBLITZ® and external triggering**
- **Gigabit Ethernet interface for PC/notebook**
- **Image export in BMP or AVI format**
- **MotionBLITZ® Director for Windows™ 2000/XP**
- **Shock proof HiG Version (100G) available**

*fps: frames per second

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Special Electronics
Image Processing
Digital SlowMotion

MIKROTRON

MotionBLITZ® Cube3

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MotionBLITZ® Cube3
512(h) x 512(v) pixels at 2,500 frames per second
up to 120,000 frames/sec. at reduced resolution

Available Models

Model Type	Monochrome/ Color	Recording Time at 512 x 512, 2,500 fps*	Photo Sensitivity accordant	ImageBLITZ® Option	Hi-G Option (100G)
MotionBLITZ® Cube3-3	M	3.3 sec.	2.000ASA	Yes	Yes
MotionBLITZ® Cube3-6		6.5 sec.		Yes	Yes
MotionBLITZ® Cube3-3C	C	3.3 sec.	800ASA	Yes	Yes
MotionBLITZ® Cube3-6C		6.5 sec.		Yes	Yes

Specifications:

Maximal Resolution	512(H) x 512(V) Pixel
Recording Speed	300 - 2,500 fps* at max. resolution, up to 120,000 fps* at reduced resolution
Pixel Size	16 x 16 µm
Active Sensor Area	8,19 x 8,19 mm, 11,58 mm diagonal
Illumination	9V/lux-sec at 550 nm, ADVref = 1V
Internal Dynamics	57 dB
Shutter	Electronic full frame shutter: min. 1/300 sec. up to 1/250,000 sec.
Lens Mount	C-Mount thread, optional: Nikon F-Mount bayonet using adapter
Operating Software	MotionBLITZ® Director for Windows™ 2000/XP
Export Formats	BMP images, AVI videos
Image Footer	256 characters per recorded sequence, appears on each frame
Camera Connections:	
Camera to PC	1000/100 Gigabit Ethernet (GigE) Interface
Trigger	External TTL signal and sync. input
Sync. Signals	TTL input/output
Analog Input	0 - 2,5 V (8-Bit ADC), digitally displayed per image
Digital Input	4-Bit TTL, incl. trigger, binary status per image
Technical Data:	
Dimensions	94x70x110 mm /3.7"x2.75"x4.3" (WxHxL)
Weight	980 g (2.16 lbs) incl. battery, without lens
Temperature Range	+ 5....45°C
Power Supply	Ext. power supply 10,5 - 24 V DC or internal battery
Battery Capacity	Recording mode: approx. 30 min. standby mode: approx. 1 hr

*fps: frames per second

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