

# HIGH - SPEED CAMERA SYSTEM

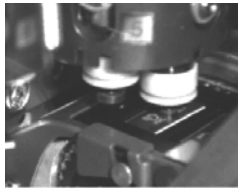
## MotionBLITZ<sup>®</sup>-Kit

### Key Features

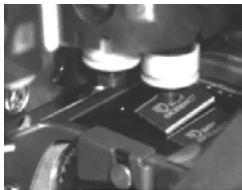
- Camera with *MegaPixel* Sensor, 1280(H) x 1024(V) monochrome or color
- 500 fps@ full resolution
- Adjustable frame rate from 50 up to 16.000 fps
- Adjustable resolution up to 1280 (H) x 1024 (V) pixels
- PCI/PCI-X camera control and frame store board with onboard memory
- Recording stop from an external trigger
- Windows XP™ based installation and user interface software and documentation
- Image storage in BMP and AVI file format



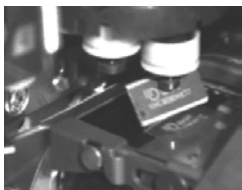
### The invisible becomes visible



One picture says more than thousand words. Modern production processes are constantly made faster and more complex. If a fault occurs, the human eye is not able to grasp and analyse the mistake. Only high-speed video recording makes the invisible visible.



Such recordings enable you to reveal weak points in production and to analyse machine malfunctions immediately. That makes optimal production possible. This is only one of numerous applications for high-speed camera systems. You can find further applications in product development, quality control and research.



### Analysis of fast moving or explosive events

#### Movement of fast running machine parts testing

- Optimization of production machines
- Explosive-like processes testing
- Shock and vibration analysis
- Material testing, crash test, QC

### Easy Installation and Operation

The MotionBLITZ<sup>®</sup>-Kit is a peripheral for capturing high-speed digital images in the PC. MotionBLITZ<sup>®</sup>-Kit consists of a very compact high-speed CMOS-camera, small size PCI/PCI-X interface board with onboard memory, installation and user interface software and documentation. System operation is easy with the MotionBLITZ<sup>®</sup> Windows™ based application software.

### Flexible in Resolution and Speed

Because of random programmability of window size and position (ROI) as well as clock frequency resolution and frame rate the system can be easily adapted for any specific need. The required ROI in the maximum window size of 1280 (H) x 1024 (V) pixels can be defined by using the mouse. At the same time the system indicates the resulting frame rate. In the reverse case the system indicates the corresponding maximum resolution on the basis of the required frame rate.

### Triggering for sporadic Events

For the analysis of rapidly moving, sporadic events, the MotionBLITZ<sup>®</sup>-Kit offers an external trigger feature. The ring buffer storage makes it possible to record the history of an event and its progress. The started system records images continuously, until the high-speed recording is stopped by an external trigger signal or by a key button.

The images of the event reside now on the PCI/PCI-X interface board for display and analysis. Images can be archived in the standard BMP or AVI-file format on the hard disk.

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### Performance Specifications

<b>Resolution</b>	Max. 1280(H) x1024 (V) pixel (resolution variably adjustable)
<b>Recording Rates</b>	50 up to 16.000 fps.(500 fps @ full resolution)
<b>Sensor</b>	RGB color with BAYER filter or 8-bit monochrome
<b>Recording Time</b>	Max. 1.5 sec. (with full resolution @ 500 fps)
<b>Shutter Speed</b>	Global Electronic Shutter from 4 $\mu$ s to 1/ frame
<b>Camera dimensions</b>	63 x 63 x 47 mm ( WxHxL )
<b>Lens Mount</b>	Standard C-mount, optional F-mount adapter
<b>Camera Weight</b>	300 g
<b>Camera Interface Board</b>	Small size PCI / PCI-X board with onboard memory
<b>Trigger Interface</b>	Ext. TTL-trigger input
<b>Camera Cable</b>	5 meter
<b>Operator Environments</b>	MotionBLITZ <sup>®</sup> operator software for Windows 2000 or XP <sup>™</sup>
<b>Frame Storage</b>	BMP and AVI file format

### Model Versions

<b>MotionBLITZ<sup>®</sup>-Kit M</b>	Monochrome camera
<b>MotionBLITZ<sup>®</sup>-Kit C</b>	Color camera

### Sample Frame Rates

Resolution	Frame Rate	Number of Frames	Recording Time
1280 x 1024	500 fps	818	1.5 sec.
800 x 512	1.000 fps	2.620	2.6 sec.
640 x 256	2.000 fps	6.550	3.3 sec.
320 x 128	4.000 fps	2.6210	6.6 sec.
320 x 64	8.000 fps	5.2420	6.6 sec.
640 x 32	16.000 fps	104.856	6.7 sec.

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