**Extremely Fast with Supreme Light Efficiency**

Mikrotron MotionBLITZ® Cube5 is the latest of Mikrotron’s Cube High-Speed Recording camera family, developed to face high-speed requirements by cutting edge camera technology. Up to 5,000 fps are capable at the camera’s 512(H) x 512(V) resolution, however increasable to impressing 195,000 fps by reduction of the Region of Interest (RoI). However, light is not an issue: the Cube’s light sensitivity of 1,000 / 800 ASA (mono-chrome / color) enables invaluable high speed recordings even in less illuminated applications.

**Recording with History Function**

The MotionBLITZ® Cube5 onboard ring buffer allows buffering of triggered events up to 3 seconds at full resolution and speed (extended buffer option). The history function allows pre and post event recording through free selection of frames or recording time. The optional available ImageBLITZ® Auto Trigger even goes a step further: it allows object generated triggering directly through the camera by a selectable section of the RoI used as sensor.

**Maximum Performance at Minimum Form Factor**

The MotionBLITZ® Cube5 comes up with the smallest form factor ever for a high speed recording camera at this capability. A housing depth of appx. 92mm (C-Mount version) allows the MotionBLITZ® Cube5 to be utilized in an unrivalled manner even in cramped space conditions.

**GigE Vision: Absolute Flexibility at High Transfer Rates**

The MotionBLITZ® Cube5 Gigabit-Ethernet interface allows camera operation from any standard PC or Notebook at highest transfer rates. Provided with a ruggedized Phoenix industrial plug, the Cube5 is designed for operation under real industrial conditions. Based on innovative GigE Vision communication standard, the Cube5 enables a multiplicity of image processing software to be frictionless attached.

**A Great Variety of Extension Options**

Get exactly the camera you need: MotionBLITZ® Cube5 offers a multiple range of optional all-purpose extensions. Many options from ring buffer upgrade to ImageBLITZ® Auto Trigger or multi sequence recording are available. The optional integrated F-Mount Lens mount provides a much larger field of view which results in an evenly exposed image. Even a Hi-G-Version is available.

- 1,000 / 800 ASA Light Sensitivity
- Up to 5,000 fps\(^*\) at 512(H) x 512(V) Resolution
- Up to 195,000 fps by Infinitely Variable RoI
- Smallest Form Factor, Minimal Housing Depth
- GigE Vision Interface with Phoenix Industrial Plug
- Battery Pack for up to 1 h Operating
- Power Down Mode for 8h Data Retention
- Multisequence Recording
- ImageBLITZ® Auto Trigger
- Memory Extension
- Shock and Vibration Proof Version Available
- IRIG-B Frame Synchronisation

\(^*\)fps (frames per second)
MotionBLITZ® Cube5
Sensitive High-Speed Recording Camera

Technical Data

| Light Sensitivity          | 1,000 ASA monochrome
|                           | 800 ASA color
| Sensor                    | Fast CMOS Sensor, 512(H) x 512(V) pixel
|                           | 8-bit monochrome or RGB color with BAYER filter
| Pixel Size                | 16 x 16 μm
| Sensor Sensitivity        | 9V/lux-Sec. bei 550nm
| (monochrome)              | 
| Frame Speed               | 28 - 5,000 fps* @ full 512 (H) x 512 (V) resolution
|                           | Up to 195,000 fps* with reduced resolution
| Recording Time            | 1.5 sec. @ full resolution & 5,000 fps
|                           | Extended recording times at reduced resolution and/or image speed
| Shutter                   | Global Electronic Shutter from 2μsec to 1/ frame rate
| Internal Dynamics         | 59 dB
| Spectral Bandwidth        | 400 – 800 nm
| System Design             | Modular, scalable and network-compatible concept via standard PC or notebook
|                           | Synchronous processing of multiple cameras
| Camera Size               | 93 (B) x 69 (H) x 92 (T) mm (C-Mount)
|                           | 93 (B) x 69 (H) x 128 (T) mm (F-Mount)
| Weight                    | 900g, without lens
| Environment               | +5...45° C, (41-113°F)
| Battery Capacity          | Recording mode: 1h; standby mode 1.5 hours; Power Down mode B h
| Lens Mount                | C-Mount; F-Mount (option)
| Power Supply              | 10.5 - 24V DC external power supply and internal rechargeable battery
| Power Consumption         | 15W max
| Software                  | MotionBLITZ® operator software for Windows 2000/XP™
| Frame Storage             | BMP and AVI - file format
| Camera-PC Interface       | 1000/100 Ethernet Interface (Gigabit Ethernet)
| Triggering / Synchronisation | Ext. Trigger; ImageBLITZ / Sync.-Input on the camera (opto coupled)
| Synchronisation           | TLL-Sync. Output (opto coupled)
| Analog Input              | 0-2.5V (8-Bit) (opto coupled)
| Digital Input             | 4 Bit (TLL) (opto coupled)

Optional Extensions

- Extended Buffer to 3 sec recording time @ full resolution & speed
- ImageBLITZ® Auto Trigger
- Multi sequence recording
- F-Mount
- Hi-G 100g
- Shock 100g / 25 msec
- Vibration 10g
- Industrial Standard
- Phoenix Interface Plug
- IRIG B Synchronisation

Recording Data

<table>
<thead>
<tr>
<th>Resolution</th>
<th>Frame Rate</th>
<th>Resolution</th>
<th>Frame Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>512(H) x 512(V)</td>
<td>5,000 fps*</td>
<td>512(H) x 64(V)</td>
<td>40,000 fps*</td>
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<tr>
<td>512(H) x 256(V)</td>
<td>10,000 fps*</td>
<td>512(H) x 28(V)</td>
<td>80,000 fps*</td>
</tr>
<tr>
<td>512(H) x 128(V)</td>
<td>20,000 fps*</td>
<td>512(H) x 10(V)</td>
<td>195,000 fps*</td>
</tr>
</tbody>
</table>

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