HiSpec 2  Innovative Low-Light High-Speed Camera

- Forget About Bright Lights – Until now, lighting has sometimes been a challenge with high-speed imaging. No more! The photo-sensitivity of the HiSpec 2 enables high speed recordings at 1.3 megapixels under normal lighting conditions.

- Optional ImageBLITZ® Auto Trigger – Now it’s easy to capture those elusive random events. Simply define a “region of interest” in the field of view and let the ImageBLITZ® trigger take over. Any change in the pre-set image area will stop the recording and save the event sequence. No special hardware or intrusive wiring is required.

- Optional Hi-G Configuration - The HiSpec 2 has been certified to 100 “G” accelerations making it the ideal combination of ruggedness with small size. Fits into tight spaces for on-board automotive impact testing, military ordinance testing and other harsh environments. The built-in battery operates in three modes:
  - Ensures fail-safe operation in the event of a power loss
  - Allows “untethered” operation for up to 1 hour
  - Has image retention mode of up to 24 hours

- Use it Everywhere – The HiSpec 2’s Gigabit Ethernet interface allows the user to operate multiple cameras from any standard Notebook / PC up to a distance of 100 meters. The HiSpec 2 is designed for easy operation in virtually any industrial or laboratory environment.

See what you’ve been missing
# Fastec HiSpec 2

## Camera Specifications

**Standard Features**

**System Design**
- Scaleable and network-compatible with standard and/or notebook PCs
- Synchronous processing of multiple cameras

**Sensor**
- CMOS sensor, 1280 x 1024 pixels, 10-bit monochrome or RGB color with BAYER filter
- Active pixel area 22.9mm diagonal

**Pixel Size**
- 14 x 14 µm

**Light Sensitivity**
- 3,200 ISO monochrome, 1,600 ISO color

**Spectral Bandwidth**
- 400 - 900 nm

**Record Rate**
- Up to 506 fps at full resolution, up to 298,851 fps at reduced resolution

**Image Memory**
- 4GB standard. Optional upgrade to 8GB

**Recording Time**
- 6.4 seconds at full resolution
- Longer record times with variable resolution and frame rates

**Shutter**
- Global electronic shutter from 2µsec to 1 second in 2µsec steps

**Lens Mount**
- C-Mount or F-Mount

**Frame Format**
- BMP, TIF, DNG, JPG or AVI file format

**Camera / PC Interface**
- 1000/100 Ethernet interface (Gigabit Ethernet)

**Phase Lock**
- Multiple cameras can be synchronized to a master camera or to an external source such as optional IRIG-B

**Trigger**
- Contact closure, external TTL signal or software trigger (ImageBLITZ® Auto Trigger)

**Multi-Sequence Record Mode**
- 2, 4, 8 or 16 individual recording partitions

**Camera Size**
- 69mm H x 93mm W x 93mm D with C-Mount
- 63mm H x 93mm W x 128mm D with F-Mount

**Camera Weight**
- .9 kg. without lens

**Operating Environment**
- + 5° to + 45°C

**Power Supply**
- 10 - 30V DC external power supply

**Power Consumption**
- 15W maximum

**Software Specifications**

**Camera Control Software**
- HiSpec 2 Director software for Windows 2000/XP/Vista

**Image Amplification**
- Digital gain from 1 to 4 in 8 steps

**Optional SDK**
- GiGE Vision compatible

**Options Available**

**Memory**
- 8GB

**Auto Trigger**
- ImageBLITZ® Software – Auto Trigger

**Multi-Sequence Mode**
- 2, 4, 8 or 16 individual recording partitions

**IRIG-B**
- Range timing standard

**Hi-G Certified**
- Certified for shock to 100g for 20ms, vibration to 10g

**F-Mount Adapter**
- Convert from C-Mount lenses to F-Mount lenses

## Sample Frame Rates and Resolutions

<table>
<thead>
<tr>
<th>Maximum Frame Rate</th>
<th>Resolution @ Maximum</th>
<th>Recording Time @ Maximum</th>
<th>Total Frames</th>
<th>Recording Time @ Maximum</th>
<th>Total Frames</th>
</tr>
</thead>
<tbody>
<tr>
<td>506 fps</td>
<td>1280 x 1024</td>
<td>6.5 sec</td>
<td>3,274</td>
<td>12.9 sec</td>
<td>6,550</td>
</tr>
<tr>
<td>718 fps</td>
<td>1280 x 720</td>
<td>6.5 sec</td>
<td>4,656</td>
<td>13.0 sec</td>
<td>9,317</td>
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<tr>
<td>1,008 fps</td>
<td>1280 x 512</td>
<td>6.5 sec</td>
<td>6,548</td>
<td>13.0 sec</td>
<td>13,103</td>
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<tr>
<td>1,319 fps</td>
<td>768 x 600</td>
<td>7.1 sec</td>
<td>9,313</td>
<td>14.1 sec</td>
<td>18,635</td>
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<tr>
<td>2,312 fps</td>
<td>480 x 480</td>
<td>8.1 sec</td>
<td>18,627</td>
<td>16.1 sec</td>
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<tr>
<td>5,672 fps</td>
<td>320 x 240</td>
<td>9.9 sec</td>
<td>55,879</td>
<td>19.7 sec</td>
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<td>13,540 fps</td>
<td>144 x 144</td>
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<td>206,967</td>
<td>30.6 sec</td>
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<td>112,183 fps</td>
<td>128 x 2</td>
<td>149.4 sec</td>
<td>16,877,450</td>
<td>298.8 sec</td>
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**4GB Standard**

**8GB Option**

Specifications subject to change without notice. ImageBLITZ® is a trademark of Mikrotron

R1-HiSpec2-04/12