

Fastec HiSpec 5

3 Megapixel High Resolution High-Speed Camera

Fast Facts

- Outstanding Image Quality: Up to 523 frames per second at 1696 x 1710 resolution.
- Extremely Fast: 1150 frames per second at 1280 x 1024 resolution.
- Well Connected: GiGE compatible for easy remote camera control.
- Fits Anywhere: Only 69mm H x 93mm W x 92mm D, C-Mount and .9 kg.
- GiGE Vision: Industry control interface protocol standard. 



High Resolution and High Speed

The HiSpec 5 provides superb quality images with its 1696 x 1710 resolution. And it is a perfect fit for a wide variety of high-speed motion applications with the capability to capture up to megapixel images at more than 1400 fps.

Optional ImageBLITZ® Auto Trigger & Multi-Sequence Mode

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. And the optional Multi-Sequence Mode allows the recording of multiple events by partitioning the memory into 2, 4, 8 or 16 individual recordings.

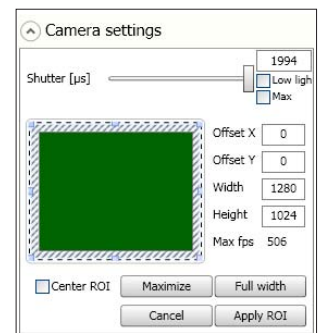
Optional Hi-G Configuration

The HiSpec 5 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 ordnance testing and other harsh environments. The built-in battery operates in three modes:

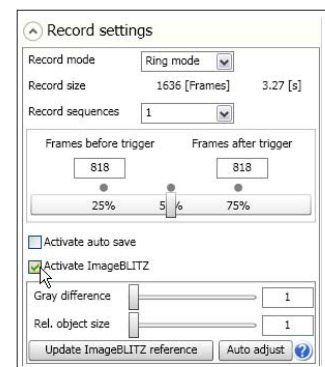
- Ensures fail-safe operation in the event of a power loss
- Allows "untethered" operation for up to 1 hour
- Has image retention mode of up to 24 hours

Use It Everywhere

The HiSpec 5'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 5 is designed for easy operation in virtually any industrial or laboratory environment.



Easy to use
Camera Control Software



ImageBLITZ® Auto Trigger
feature based on selectable
region of interest

See what you've been missing

FASTEC  IMAGING™

Fastec HiSpec 5

3 Megapixel High Resolution High-Speed Camera

CAMERA SPECIFICATIONS

| | |
|------------------------------|--|
| SYSTEM DESIGN | Scaleable and network-compatible with standard and/or notebook PCs. Synchronous processing of multiple cameras |
| SENSOR | CMOS sensor, 1696 x 1710 pixels, 8-bit monochrome or RGB color with BAYER filter. Active pixel area 19.27mm diagonal |
| PIXEL SIZE | 8 x 8 μ m |
| LIGHT SENSITIVITY | 1,600 ISO monochrome, 1,000 ISO color |
| SPECTRAL BANDWIDTH | 400 - 900 nm |
| RECORDING RATE | Up to 523 fps at full resolution. Up to 298,851 fps at reduced resolution |
| MEMORY | 4GB. Optional upgrade to 8GB |
| RECORDING TIME | 3.2 seconds at full resolution. Longer record times with variable resolution and frame rates |
| SHUTTER | Global electronic shutter from 2 μ sec to 1 second in 2 μ sec 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 optional ImageBLITZ® Auto Trigger software |
| CAMERA SIZE | 69mm H x 93mm W x 92mm D with C-Mount. 69mm 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 Director 2 software for Windows 7/Vista/XP |
| IMAGE AMPLIFICATION | Digital gain from 1 – 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 |
| CONNECTOR POSITION | Select from rear or side connector positions |

TYPICAL RESOLUTIONS & FRAME RATES

| Maximum Frame Rate | Resolution | 4GB STANDARD | | 8GB OPTION | |
|--------------------|-------------|---------------------------------|--------------|---------------------------------|--------------|
| | | Recording Time @ Max Frame Rate | Total Frames | Recording Time @ Max Frame Rate | Total Frames |
| 523 fps | 1696 x 1710 | 2.8 sec. | 1,480 | 5.7 sec. | 2,960 |
| 1,150 fps | 1280 x 1024 | 2.8 sec. | 3,277 | 5.7 sec. | 6,555 |
| 1,633 fps | 1280 x 720 | 2.8 sec. | 4,654 | 5.7 sec. | 9,324 |
| 1,405 fps | 1024 x 1024 | 2.9 sec. | 4,075 | 5.8 sec. | 8,191 |
| 4,453 fps | 640 x 480 | 3.1 sec. | 13,982 | 6.3 sec. | 27,965 |
| 5,001 fps | 512 x 512 | 3.3 sec. | 16,403 | 6.6 sec. | 33,007 |
| 14,781 fps | 320 x 240 | 3.8 sec. | 55,872 | 7.6 sec. | 111,892 |
| 298,851 fps | 128 x 2 | 56.1 sec. | 16,777,495 | 114.0 sec. | 34,069,014 |

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