

# Fastec HiSpec 1-HR

## 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 fps at 1280 x 1024 resolution.
- Well Connected: GiGE compatible for easy remote camera control.
- Fits Anywhere: Only 63mm H x 63mm W x 65mm D and .28 kg.
- GiGE Vision: Industry standard control interface.



### High Resolution and High Speed

The HiSpec 1-HR provides superb quality images with it's 1696 x 1710 pixel resolution. And it is a perfect fit for a wide variety of high-speed motion applications with the capability to capture megapixel images at more than 1400 fps.

### Optional ImageBLITZ® Auto Trigger

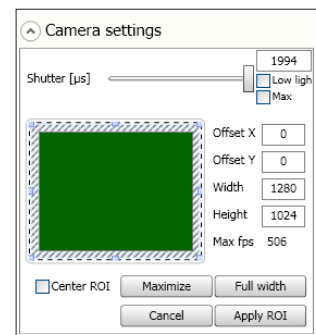
Now it's easy to capture those elusive random events. Simply define a "region of interest" in the field of view and let the ImageBLITZ® trigger software take over. Any change in the pre-set image area will stop the recording and save the event sequence. No special hardware or intrusive wiring is required.

### Optional Multi-Sequence Record Mode

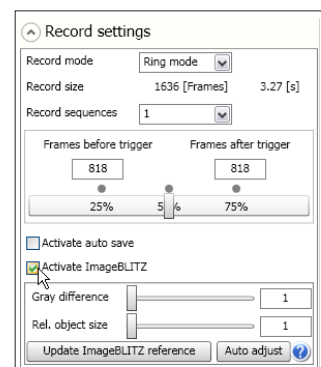
The optional Multi-Sequence Record Mode allows the recording of multiple events by partitioning the memory into 2, 4, 8 or 16 individual recordings. And with the HiSpec 1-HR's unique Burst Trigger Mode, you can capture hundreds of separate image sequences in the memory without downloading.

### Use it Everywhere

The HiSpec 1-HR'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 1-HR 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*




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## 3 Megapixel High Resolution High-Speed Camera

### CAMERA SPECIFICATIONS

<b>SYSTEM DESIGN</b>	Scaleable and network-compatible with standard and/or notebook PCs. Synchronous processing of multiple cameras
<b>SENSOR</b>	CMOS sensor, 1696 x 1710 pixels, 8-bit monochrome or RGB color with BAYER filter. Active pixel area 19.27mm diagonal
<b>PIXEL SIZE</b>	8 x 8 $\mu$ m
<b>LIGHT SENSITIVITY</b>	1200 ISO monochrome, 400 ISO color
<b>SPECTRAL BANDWIDTH</b>	400 - 900 nm
<b>RECORDING RATE</b>	Up to 523 fps at full resolution, up to 298,851 fps at reduced resolution
<b>MEMORY</b>	2GB
<b>RECORDING TIME</b>	1.5 seconds at full resolution. Longer record times with variable resolution and frame rates
<b>SHUTTER</b>	Global electronic shutter from 2 $\mu$ sec to 1 second in 2 $\mu$ sec steps
<b>LENS MOUNT</b>	C-Mount or F-Mount
<b>FRAME FORMAT</b>	BMP, TIF, DNG, JPG or AVI file format
<b>CAMERA/PC INTERFACE</b>	1000/100 Ethernet interface (Gigabit Ethernet)
<b>PHASE LOCK</b>	Multiple cameras can be synchronized to a master camera or to an external source
<b>TRIGGER</b>	Contact closure, external TTL signal or software trigger with optional ImageBLITZ® Auto Trigger
<b>MULTI-SEQUENCE RECORD MODE</b>	2, 4, 8 or 16 individual recording partitions (optional)
<b>CAMERA SIZE</b>	63mm H x 63mm W x 65mm D with C-Mount. 63mm H x 63mm W x 92.5mm D with F-Mount
<b>CAMERA WEIGHT</b>	.28 kg. without lens
<b>OPERATING ENVIRONMENT</b>	+5° to +35°C (to 45°C with cooling option)
<b>POWER SUPPLY</b>	10 - 30V DC external power supply
<b>POWER CONSUMPTION</b>	7.5W maximum
<b>CONNECTOR POSITION</b>	Select from rear or side connector positions

### SOFTWARE SPECIFICATIONS

<b>CAMERA CONTROL SOFTWARE</b>	HiSpec 2 Director software for Windows 2000/XP/Vista
<b>IMAGE AMPLIFICATION</b>	Digital gain 1, 1.5 or 2
<b>OPTIONAL SDK</b>	GiGE Vision compatible 

### TYPICAL RESOLUTIONS & FRAME RATES

Maximum Frame Rate	Resolution	Recording Time @ Maximum Frame Rate	Total Frames
523 fps	1696 x 1710	1.4 sec.	743
1,150 fps	1280 x 1024	1.4 sec.	1,633
1,633 fps	1280 x 720	1.4 sec.	2,335
1,405 fps	1024 x 1024	1.4 sec.	2,051
4,453 fps	640 x 480	1.6 sec.	6,991
5,001 fps	512 x 512	1.6 sec.	8,202
14,781 fps	320 x 240	1.9 sec.	27,936
298,851 fps	128 x 2	28.1 sec.	8,388,747

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