

# Fastec HiSpec

*Innovative Low-Light High-Speed Camera*

## Fast Facts

- Excellent Light Sensitivity: 2,500 ISO monochrome, 700 ISO color.
- Outstanding Image Quality: Up to 500 frames per second at 1280 x 1024 resolution.
- Extremely Fast: Adjustable frame rate up to 112,000 frames per second.
- Well Connected: GiGE Vision compatible for easy remote camera control.
- Fits Anywhere: Only 63mm H x 63mm W x 65mm D and .28 kg.



## Forget About Bright Lights

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

## ImageBLITZ® Auto Trigger

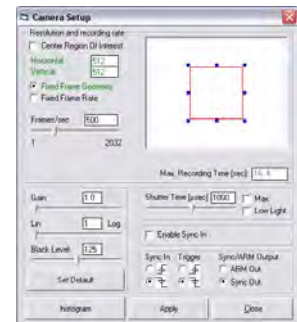
Now it's easy to capture those elusive random events. Simply define a "region of interest" in the field of view and let the ImageBLITZ® trigger take over. Any change in the pre-set image area will stop the recording and save the event sequence. No special hardware or intrusive wiring is required.

## Burst Trigger Mode

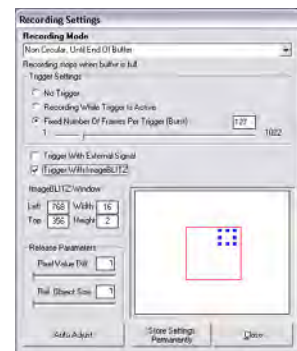
With the HiSpec's unique Burst Trigger Mode, you can capture hundreds of image sequences in the memory without downloading. Multiple events can easily be recorded over an extended period of time. Users can also partition the memory into 16 unique segments for additional flexibility.

## Use it Everywhere

The HiSpec'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 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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## 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, 1280 x 1024 pixels, 10-bit monochrome or RGB color with BAYER filter
<b>Pixel Size</b>	14 x 14 $\mu$ m
<b>Light Sensitivity</b>	2500 ISO monochrome, 700 ISO color
<b>Spectral Bandwidth</b>	400 - 900 nm
<b>Recording Rate</b>	Up to 500 fps at full resolution, up to 112,000 fps at reduced resolution
<b>Memory</b>	2GB
<b>Recording Time</b>	Varies with frame rate and resolution
<b>Shutter</b>	Global electronic shutter from 2 $\mu$ sec to 1second
<b>Lens Mount</b>	C-mount or F-mount
<b>Frame Format</b>	BMP 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
<b>Camera Size</b>	63mm H x 63mm W x 65mm D. With C-Mount lens: 63mm H x 63mm W x 92.5mm D
<b>Camera Weight</b>	.28 kg. without lens
<b>Operating Environment</b>	+5° to +35°C
<b>Power Supply</b>	10 - 30V DC external power supply
<b>Power Consumption</b>	7.5W maximum

## Software Specifications:

<b>Camera Control Software</b>	HiSpec Director software for Windows 2000/XP/Vista
<b>Image Amplification</b>	Digital gain from 1 to 4 in 8 steps
<b>Optional SDK</b>	GiGE Vision compatible 

## TYPICAL RESOLUTIONS & FRAME RATES

Maximum Frame Rate	Resolution	Recording Time @ Maximum Frame Rate	Total Frames
506 fps	1280 x 1024	3.2 sec	1,693
1008 fps	1280 x 512	3.2 sec	3,271
1,319 fps	768 x 600	3.5 sec	4,654
2,312 fps	480 x 480	4.0 sec	9,309
13,540 fps	144 x 144	7.6 sec	103,436
112,183 fps	128 x 2	66.4 sec	7,447,438

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