

# Fastec HiSpec

*Innovative Low-Light High-Speed Camera*



## Fast Facts

- Amazing Light Sensitivity: 2,500 ASA monochrome, 2000 ASA color.
- Outstanding Image Quality: Up to 500 frames per second at 1280x1024 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 always been a challenge with high-speed imaging. No more! The unprecedented photo-sensitivity of the HiSpec enables high speed recordings at 1.3 megapixels under normal lighting conditions.

## Software-Based 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 software 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.

*See what you've been missing*

**FASTEC IMAGING™**

# Fastec HiSpec

## Low-Light High-Speed Camera

### SPECIFICATIONS

<b>System Design</b>	Modular; 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 ASA monochrome, 2000 ASA color
<b>Spectral Bandwidth</b>	400 - 900 nm
<b>Image Amplification</b>	Digital gain from 1 to 4 steps
<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 Storage</b>	BMP or AVI file format
<b>Camera Control Software</b>	HiSpec Director software for Windows 2000/XP/Vista
<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
<b>Camera Weight</b>	.28 kg. without lens
<b>Operating Environment</b>	+5° to +45°C
<b>Power Supply</b>	10 - 30V DC external power supply
<b>Power Consumption</b>	7.5W maximum

### TYPICAL RESOLUTIONS & FRAME RATES

Resolution	Maximum Frame Rate	Recording Time @ Maximum Frame Rate
1280 x 1024	506 fps	3.2 sec.
1280 x 720	718 fps	3.2 sec.
1280 x 640	808 fps	3.2 sec.
1280 x 512	1008 fps	3.2 sec.
1280 x 256	2000 fps	3.3 sec.
768 x 600	1,319 fps	3.5 sec.
624 x 480	1,922 fps	3.7 sec.
480 x 480	2,312 fps	4.0 sec.
288 x 288	5,197 fps	5.0 sec.
144 x 144	13,540 fps	7.6 sec.
144 x 72	24,433 fps	8.5 sec.
144 x 2	112,183 fps	66.4 sec.