Fastec HiSpec 1

Innovative Low-Light High-Speed Camera

Fast Facts

- Excellent Light Sensitivity: 3,200 ISO monochrome, 1,600 ISO color.
- Outstanding Image Quality: Up to 506 frames per second at 1280 x 1024 resolution.
- Extremely Fast: Adjustable frame rate up to 112,000 frames per second.
- 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.

Forget About Bright Lights

Until now, lighting has sometimes been a challenge with high-speed imaging. No more! The photo-sensitivity of the HiSpec 1 enables high speed recordings at 1.3 megapixels under normal lighting conditions.
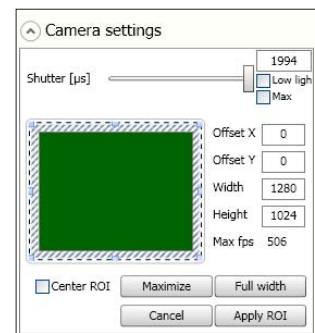
ImageBLITZ® Auto Trigger

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.
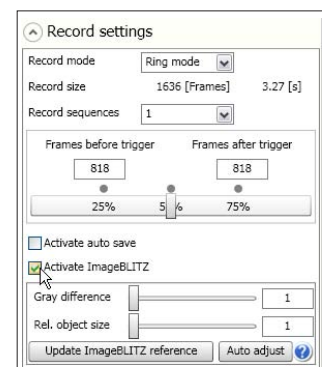
Multi-Sequence Record Mode

The 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's unique Burst Trigger Mode, you can capture hundreds of separate image sequences in the memory without downloading.

Use it Everywhere

The HiSpec 1'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 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 1
Innovative Low-Light 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, 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
RECORDING RATE	Up to 506 fps at full resolution, up to 112,183 fps at reduced resolution
MEMORY	2GB
RECORDING TIME	3.2 seconds at full resolution. Longer record times with variable resolution and frame rates
SHUTTER	Global electronic shutter from 2µsec to 1second
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
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	63mm H x 63mm W x 65mm D with C-Mount lens. 63mm H x 63mm W x 92.5mm D with F-Mount lens
CAMERA WEIGHT	.28 kg. without lens
OPERATING ENVIRONMENT	+5° to +35°C (to +45° with cooling option)
POWER SUPPLY	10 - 30V DC external power supply
POWER CONSUMPTION	7.5W maximum

SOFTWARE SPECIFICATIONS

CAMERA CONTROL SOFTWARE	HiSpec Director 2 software for Windows 7/Vista/XP
IMAGE AMPLIFICATION	Digital gain from 1 to 4 in 8 steps
OPTIONAL SDK	GiGE Vision compatible *GiGE VISION*

TYPICAL RESOLUTIONS & FRAME RATES

Maximum Frame Rate	Resolution	Recording Time @ Maximum Frame Rate	Total Frames
506 fps	1280 x 1024	3.2 sec.	1,636
718 fps	1280 x 720	3.2 sec.	2,327
1,008 fps	1280 x 512	3.2 sec.	3,272
1,319 fps	768 x 600	3.5 sec.	4,654
2,312 fps	480 x 480	4.0 sec.	9,309
5,672 fps	320 x 240	4.9 sec.	27,926
13,540 fps	144 x 144	7.6 sec.	103,436
112,183 fps	128 x 2	74.7 sec.	8,378,368