

# HiSpec 5

3 Megapixel High Resolution  
 High Speed Camera

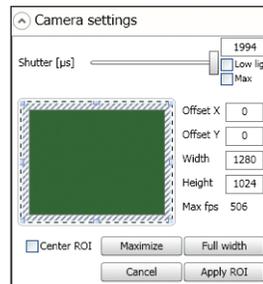


### Fast Facts

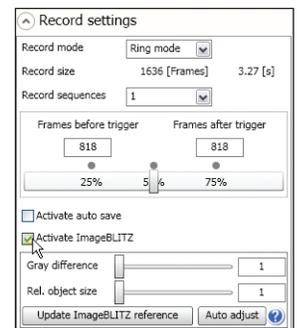
- **Outstanding Image Quality:** Up to 523 frames per second at 1696 x 1710 resolution
- **Extremely Fast:** 1150 fps at 1280 x 1024 resolution
- **Well Connected:** GiGE compatible for easy remote camera control
- **Fits Anywhere:** Only 69mm H x 93mm W x 92mm D, C-Mount and .9 kg
- **GiGE Vision:**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



Easy to use  
 Camera Control  
 Software



ImageBLITZ® Auto  
 Trigger feature  
 based on selectable  
 region of interest



## Key Features

- **High Resolution and High Speed** – The HiSpec 5 provides superb quality images with its 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 & 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 ordinance 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.

See what you've been missing

# Fastec HiSpec 5

## Camera Specifications

### Standard Features

#### 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  $\mu$ m

#### Light Sensitivity

1600 ISO monochrome, 1000 ISO color

#### Spectral Bandwidth

400 - 900 nm

#### Record Rate

Up to 523 fps at full resolution, up to 298,851 fps at reduced resolution

#### Image Memory

4GB. Optional upgrade to 8GB or 16GB

#### Recording Time

3.2 seconds at full resolution

Longer record times with variable resolution and frame rates

#### Shutter

Global electronic shutter from 2 $\mu$ sec to 1 second in 2 $\mu$ 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 software trigger with optional ImageBLITZ<sup>®</sup> Auto Trigger

#### Multi-Sequence Record Mode

2, 4, 8 or 16 individual recording partitions (optional)

#### 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 2 Director 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 or 16GB

#### Auto Trigger

ImageBLITZ<sup>®</sup> 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 25ms, vibration to 10g

#### F-Mount Adapter

Convert from C-Mount lenses to F-Mount lenses

#### Connector Position

Select from rear or side connector positions

#### Removable Storage

16GB SD Card (Not available together with 16GB memory configuration)

### Sample Frame Rates and Resolutions

Maximum Frame Rate	Resolution	4GB Standard		8GB Option		16GB Option	
		Recording Time @ Maximum Frame Rate	Total Frames	Recording Time @ Maximum Frame Rate	Total Frames	Recording Time @ Maximum Frame Rate	Total Frames
523 fps	1696 x 1710	2.8 sec.	1,480	5.7 sec.	2,960	11.4 sec.	5,920
1,150 fps	1280 x 1024	2.8 sec.	3,277	5.7 sec.	6,555	11.4 sec.	13,110
1,633 fps	1280 x 720	2.8 sec.	4,654	5.7 sec.	9,324	11.4 sec.	18,648
1,405 fps	1024 x 1024	2.9 sec.	4,075	5.8 sec.	8,191	11.6 sec.	16,382
4,453 fps	640 x 480	3.1 sec.	13,982	6.3 sec.	27,965	12.6 sec.	55,930
5,001 fps	512 x 512	3.3 sec.	16,403	6.6 sec.	33,007	13.2 sec.	66,014
14,781 fps	320 x 240	3.8 sec.	55,872	7.6 sec.	111,892	15.2 sec.	223,784
298,851 fps	128 x 2	56.1 sec.	16,777,495	114.0 sec.	34,069,014	228.0 sec.	68,138,028



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