

# HiSpec 4

3 Megapixel High Resolution  
 High Speed Camera



### Fast Facts

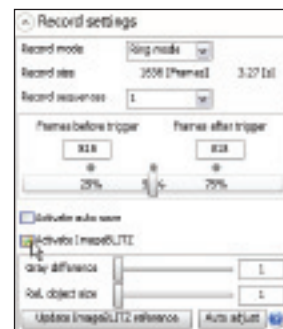
- **Outstanding Image Quality:** Up to 525 frames per second at 1696 x 1710 resolution
- **Extremely Fast:** 1155 fps at 1280 x 1024 resolution
- **Well Connected:** GiGE compatible for easy remote camera control
- **Fits Anywhere:** Only 63mm H x 63mm W x 65mm D and .28 kg.
- **GiGE Vision:** Industry standard control interface



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 4 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** – 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.
- **Optional 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 4's unique Burst Trigger Mode, you can capture hundreds of separate image sequences in the memory without downloading.
- **Use it Everywhere** – The HiSpec 4'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 4 is designed for easy operation in virtually any industrial or laboratory environment.

See what you've been missing

# Fastec HiSpec 4

## Camera Specifications

### Standard Features

#### System Design

Scaleable and network-compatible with standard and/or notebook PCs

#### Sensor

Synchronous processing of multiple cameras

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 525 fps at full resolution, up to 225,000 fps at reduced resolution

#### Image Memory

2GB, Optional Upgrade to 4GB

#### Recording Time

1.5 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

#### 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

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 2 Director software for Windows 7/Vista/XP

#### Image Amplification

Digital gain 1, 1.5 or 2

#### Optional SDK

GiGE Vision compatible



### Options Available

#### Memory

4GB

### Sample Frame Rates and Resolutions

Maximum Frame Rate	Resolution	2GB Standard		4GB Option	
		Recording Time @ Maximum Frame Rate	Total Frames	Recording Time @ Maximum Frame Rate	Total Frames
525 fps	1696 x 1710	1.4 sec.	743	2.8 sec.	1,480
1,155 fps	1280 x 1024	1.4 sec.	1,633	2.8 sec.	3,277
1,640 fps	1280 x 720	1.4 sec.	2,335	2.8 sec.	4,654
1,410 fps	1024 x 1024	1.4 sec.	2,051	2.9 sec.	4,075
4,467fps	640 x 480	1.6 sec.	6,991	3.1 sec.	13,982
5,016 fps	512 x 512	1.6 sec.	8,202	3.3 sec.	16,403
14,776 fps	320 x 240	1.9 sec.	27,936	3.8 sec.	55,872
225,000fps	128 x 2	28.1 sec.	8,388,746	56.1 sec.	16,777,495



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Specifications subject to change without notice. ImageBLITZ<sup>®</sup> is a trademark of Mikrotrotron GmbH.

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