



## **FASTCAM MH6**

### **2-Megapixel CMOS Image Sensor:**

1920 x 1400 pixels at 750fps  
1920 x 1080 pixels at 1,000fps  
1280 x 800 pixels at 2,000fps  
1280 x 256 pixels at 5,000fps

### **Class Leading Light Sensitivity:**

ISO 5,000 color  
ISO 12,500 monochrome

### **Global Electronic Shutter:**

4 $\mu$ s independent of frame rate

### **Dynamic Range (ADC):**

24-bit color  
8-bit monochrome

### **Ultra-Compact and Lightweight:**

#### **Camera Heads:**

35mm x 35.4mm x 35.4mm, weight 100g  
(0.22 lbs.)

#### **Processor:**

210mm x 70mm x 150mm, weight 3kg (6.61 lbs.)

### **Internal Recording Memory:**

24GB divided equally between up to 6 camera heads

### **High-Speed Interface:**

Provides camera control and image download to network via fast Gigabit Ethernet, and USB3 interface for local image download

### **Memory Backup to Internal SSD:**

Automated download to non-volatile 512GB built-in SSD

### **High-G Rated:**

**Camera Heads:** 160G, 10 msec, 6 axes, 1,000 times

**Processor:** 100G, 10 msec, 6 axes, 1,000 times

### **Built-in Acceleration Sensor:**

Threshold values can be set to provide record trigger input

## Ruggedized multi-head high-speed camera system

Perfectly suited for severely space- and weight-constrained locations commonly found in both on-board vehicle safety testing and military testing applications, the FASTCAM MH6 camera system provides an extraordinary mix of resolution, frame rate, light sensitivity and durability through the incorporation of multiple small and lightweight camera heads with a single processor.

The MH6 allows up to six miniature (35.4mm x 35mm x 35.4mm, 100g) camera heads to be connected to a single processor. Extremely thin and flexible connecting cables are available in varying lengths to accommodate a wide variety of camera head viewing angles and mounting locations. The camera heads are extremely rugged and have been operationally tested to 160G.

Each MH6 camera head provides outstanding image quality with 1080 HD resolution at 1,000 frame per second and an industry leading light sensitivity of ISO 5,000 color and ISO 12,500 monochrome. Camera heads are compatible with readily available 1-inch C-mount ruggedized lenses.

The MH6 system allows automated image download to built-in non-volatile memory. Image transfer to a computer is available via Gigabit Ethernet and USB3.

A built-in 3-axis / 1kHz acceleration sensor can be used to provide a trigger signal to the system if necessary.



## Camera Performance Specifications

Model	FASTCAM MH6
Full Frame Performance	750 fps 1920 x 1400 pixels
Example Frame Rates	1,000fps 1920 x 1080 pixels
	2,000fps 1280 x 800 pixels
	5,000fps 1280 x 256 pixels
Minimum Exposure Time	Global electronic shutter to 4µs selectable independent of frame rate
Dynamic Range (ADC)	8-bit monochrome, 24-bit color
Memory Capacity	24GB divided equally between up to 6 connected camera heads with non-volatile memory back-up feature
Sensor Size / Pixel Size	12.672 x 9.24mm (diagonal 15.68mm), 6.6µm square pixel
Input / Output	Input: Trigger (TTL/Switch), sync, ready, event, IRIG Output: trigger, sync, ready, rec, exposure
Camera Control Interface	High-speed Gigabit Ethernet and USB3
Data Storage Media	Built-in 512GB SSD with autosave function
Supported OS	Microsoft Windows operating systems including: 7, 8, 8.1, 10 (32/64-bit)

## Mechanical and Environmental Specifications

Mechanical	
Lens Mount	C-mount provided
Camera Head Cable Length	7m or 10m
External Dimensions	
Camera Head (size / weight)	35.4mm (H) x 35mm (W) x 35.4mm (D) / 100 grams (0.22lbs)
Processor (size / weight)	210mm (H) x 70mm (W) x 150mm (D) / 3kg (6.61lbs)
Environmental	
Operating Temperature	0 to 40C, 32° to 104° F
Storage Temperature	-20 to 60C, -4° to 140° F
Humidity	85% or less (non-condensing)
Operational Shock Camera Head	160G, 10ms, 6-axes, 1,000 times
Operational Shock Main Unit	100G, 10ms, 6-axes, 1,000 times

\* Specifications subject to change without notice.

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