

Photron



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 348 pixels at 5,000fps

Class Leading Light Sensitivity:

ISO 12232 Ssat Standard
ISO 5,000 color
ISO 12,500 monochrome

Global Electronic Shutter:

4 μ s independent of frame rate

Dynamic Range (ADC):

24-bit color
8-bit monochrome

Ultra-Compact and Lightweight:

Camera Heads:

35mm x 35mm x 36mm, weight 100g (0.22 lbs.)

Processor:

210mm x 70mm x 150mm, weight 2kg (4.41 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:

Suitable for application in high-G environments. Operation tested to 160G, 10ms, 6-axes, 1,000 times.

Built-in Acceleration Sensor:

Acceleration data saved with image, 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 control unit.

The MH6 allows up to six miniature (35mm x 35mm x 36mm, 100g) camera heads to be connected to a single control unit. Extremely thin and flexible connecting cables are available in varying lengths to accommodate a wide variety of camera head viewing angles and mounting locations. Both the camera heads and the control unit 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 allows waveform data to be saved alongside recorded images, and 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 348 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	12.7 x 9.5mm (diagonal 14.6mm), 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	
Controller/Processor (size / weight)	210mm (H) x 70mm (W) x 150mm (D) / 2kg (4.41lbs)
Camera Head (size / weight)	35mm (H) x 35mm (W) x 36mm (D) / 100 grams (0.22lbs)
Environmental	
Operating Temperature	-10 to 40C, 14° to 104°F
Storage Temperature	-20 to 60C, -4° to 140°F
Humidity	85% or less (non-condensing)
Operational Shock	160G, 10ms, 6-axes, 1,000 times

* Specifications subject to change without notice.

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