

FASTCAM MC-1

FASTCAM MC-1: High performance High-Speed Video System developed specifically for high speed production line and automation fault-finding and motion analysis applications.



The FASTCAM MC-1 has been designed to meet the requirements of development and production engineers in manufacturing and automation environments:

- A robust system with a remote camera head that is small and light weight enabling it to be positioned in inaccessible and space limited environments.
- A light sensitive CMOS imaging sensor allowing images to be captured with a low level of additional lighting.
- High frame rates and image resolution to allow clear visualization and motion analysis.
- Operational features necessary for recording in production environments including optional handheld remote controller with built-in LCD display.
- GigE interface to user networks

FEATURES

- ❑ Small and lightweight camera head 35mm x 35mm x 35mm (without lens)
- ❑ 2,000fps (frames per second) recording rate at full image resolution
- ❑ Rugged design for use in industrial environments. Remote camera head with 7 meter cable allows positioning in inaccessible locations.
- ❑ Three model options (monochrome or colour):
 - Model 500: 512 x 512 pixel resolution at frame rates up to 500fps
 - Model 2K: 512 x 512 pixel resolution at frame rates up to 2,000fps
 - Model 10K: 512 x 512 pixel resolution at frame rates up to 2,000fps and frame rates up to 10,000fps with reduced image resolution
- ❑ 1GB (4 seconds recording time at 1,000fps) and 2GB (8 seconds recording time at 1,000fps) memory options.
- ❑ Gigabit Ethernet (1000BASE-T) interface
- ❑ Optional handheld remote controller with integrated video monitor for simple control of all functions and viewing of live and recorded images.
- ❑ Low-light mode for initial set up of camera position and focus
- ❑ Intuitive Photron Fastcam Viewer (PFV) software with comprehensive range of functions for camera set-up, image acquisition, replay and storage.

Photron

			Frame Rate (fps)	Max. Resolution (Pixels)	Exposure Time	Recording duration (seconds) 1GB / 2GB memory	Recording duration (frames) 1GB / 2GB memory
Model 10K	Model 2K	Model 500	250	512x512	1/frame rate to 6µS	16.0 / 32.0	4,092 / 8,184
			500	512x512		8.0 / 16.0	4,092 / 8,184
		1,000	512x512	4.0 / 8.0		4,092 / 8,184	
		2,000	512x512	2.0 / 4.0		4,092 / 8,184	
	3,000	512x384	1.9 / 3.8	5,693 / 11,386			
	4,000	512x256	2.0 / 4.0	8,184 / 16,368			
	8,000	512x128	2.0 / 4.0	16,368 / 32,736			
	10,000	512x96	2.2 / 4.4	21,824 / 43,648			

Sensor CMOS (Bayer system color, single sensor) with 10µm pixel, global electronic shutter
Shutter Global electronic shutter from 20ms to 6µs
Saved Image Formats JPEG, AVI, TIFF, BMP, RAW (compressed or uncompressed) and RS170 video output
Phase Lock Enables cameras to be synchronized precisely together to a master camera or external source
Triggering Selectable positive or negative TTL 5Vp-p, or switch closure
Lens Mount C-mount
Data Display Frame Rate, Shutter Speed, Trigger Mode, Date or Time (can be switched), Status (Playback/Record), Real Time, Frame Count and Resolution
Video Output NTSC or PAL. Live video during recording. Ability to zoom, pan and tilt within image via keypad
Recording Modes Start, End, Center, Manual, Random, Random Reset, Random Center, Random Manual
Camera Control Through optional keypad and with Gigabit Ethernet PC interface
Camera Cable length 7 meters
Dimensions and Weight (controller)
Dimensions and Weight (camera head) L x W x H 35mm x 35mm x 35mm **Weight:** 90g / head
Power requirements 100V - 240V AC , 50-60Hz optional DC operation 22-32 VDC, 65VA

Specifications subject to change without notice.

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