High Speed Video System developed specifically for production line and automation fault finding

The FASTCAM MC2 has been designed to meet the requirements of development and production engineers in manufacturing and automation environments:

- A robust system with one or two remote camera heads that are small and lightweight enabling it to be positioned in inaccessible and space limited environments.
- A light sensitive CMOS imaging sensor allowing images to be captured with minimal 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.
- Gigabit Ethernet interface, complete with automatic download to users network.

Benefits

- Two small and lightweight camera head types:
  - Cube Cam: 35mm (1.38") x 35mm (1.38") x 33.3 mm (1.31")
  - Pencil Cam: 23mm (0.91") x 23.2mm (0.91") x 77.1mm (3.04")

- 2,000 fps (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 difficult to access locations

- Three model options (monochrome or color):
  - Model 500: 512 x 512 pixel resolution at frame rates up to 500 fps
  - Model 2K: 512 x 512 pixel resolution at frame rates up to 2,000 fps
  - Model 10K: 512 x 512 pixel resolution at frame rates up to 2,000 fps and frame rates up to 10,000 fps with reduced image resolution

- 1GB (4 seconds recording time at 1,000 fps), 2GB (8 seconds recording time at 1,000 fps) or 4GB (16 seconds recording time at 1,000 fps) memory

- Gigabit Ethernet control via Photron FASTCAM Viewer (PFV) software

- Optional handheld remote controller with integrated 5” LCD monitor for simple control of all functions and viewing of live and recorded images

- High speed video can be synchronized with external analog data from load cells or accelerometers with optional DAQ
Specifications

<table>
<thead>
<tr>
<th>Frame Rate (fps)</th>
<th>Max Resolution Horizontal</th>
<th>Max Resolution Vertical</th>
<th>Record Duration 1GB</th>
<th>Record Duration 2GB</th>
<th>Record Duration 4GB</th>
<th>Frames 1GB</th>
<th>Frames 2GB</th>
<th>Frames 4GB</th>
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- **Sensor**: CMOS (Bayer system color, single sensor) with 10μm pixel
- **Shutter**: Global electronic shutter from 20ms to 6μs
- **Saved Image Formats**: JPEG, AVI, TIFF, BMP, RAW, PNG, MOV, and FTIF. Images can be saved with or without image or comment data
- **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**: Cube Cam: C-mount  
  Pencil Cam: NF-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 scroll within image via keypad
- **Recording Modes**: Start, End, Center, Manual, Random
- **Camera Control**: Through a Gigabit Ethernet PC interface and optional RS-422 keypad
- **Camera Cable Length**: 7 meters (23')
- **Dimensions and Weight**: Processor: 195mm (7.68")H x 159mm (6.26")W x 130mm (5.12")D *excluding protrusions Weight: 5 kg (11 lbs)  
  Cube Cam: 35mm (1.38")H x 35mm (1.38")W x 33.3 mm (1.31")D *excluding protrusions Weight: 90g (0.2 lbs)  
  Pencil Cam: 23mm (0.91")H x 23.2mm (0.91")W x 77.1mm (3.04")D *excluding protrusions Weight: 145g (0.3 lbs)
- **Power Requirements**: DC operation 18 - 36 VDC, 45VA, 100V - 240V AC, 50 - 60Hz power supply provided
- **Video Output**: NTSC, PAL RS170 video output

Specifications subject to change without notice