

# ///MotionScope® M1/M2

Redlake's *MotionScope*® M series of high-speed CMOS cameras combine ease-of-use and value for your high-speed motion applications. The *MotionScope* M1 provides amazing value, delivering 640 x 512 resolution at 1000 fps, while the *MotionScope* M2 offers lightning fast speeds up to 16,000 fps with reduced vertical resolutions, or maximum resolution of 1280 x 1024 at 500 fps.

Specifically optimized for design and diagnostic applications, the innovative *MotionScope* M1/M2 architecture puts these high-speed digital cameras in a class by themselves. Compact, lightweight and featuring Firewire connectivity, the *MotionScope* M1/M2 cameras offer all the benefits of advanced imaging technology.

The *MotionScope* M1 and M2 feature built-in image memory for storing the recorded high-speed sequence for playback, editing or downloading to the PC's hard disk. Just choose which image memory option best fits your application requirements. Flexible triggering lets you create the best pre- and post- event trigger settings enabling you to capture perfect images every time.

Thanks to their intuitive and reliable "point and click" Windows control software, the *MotionScope* M1 and M2 cameras are exceptionally simple to set up and operate. Optional Image Studio software is available with more advanced features. The cameras are interfaced to your PC via a standard Firewire (IEEE-1394) interface. In the event of a power failure, a battery backup is included to ensure you never lose your data.

## Small and Lightweight High-Speed Motion Camera



### S N A P S H O T

- **Compact: 125 x 67 x 67 mm and only 1.87 lb (0.85 kg)**
- **Sturdy metal housing to withstand harsh industrial environments and electromagnetic radiation**
- **M1- frame rates of up to 1000 fps at 640 x 512**
- **M2- 1280 x 1024 at 500 fps, up to 16,000 fps at reduced vertical resolutions**
- **Firewire interface for easy set-up and fast image downloading**

### A P P L I C A T I O N S

- **Quality inspection/control on system setup and installation, throughput improvement, and troubleshooting**
- **Process engineering on packing machines, materials handling/robotics, pulp and paper, printing and folding machines**
- **Process control**
- **Research (materials, biotechnology) in material stress tests, tools and process monitoring**

# ///MotionScope® M1/M2

## PERFORMANCE SPECIFICATIONS

<b>Models</b>	Mono (8-bit), color (24-bit)
<b>Exposure</b>	Global electronic shutter, speeds from 4µsec to 1 / frame rate
<b>File Formats</b>	Raw data (Bayer format and AVI format) MPEG, BMP, JPEG, TIFF, GIF available with optional "Image Studio" software
<b>Power</b>	Power via FireWire or 12vdc power supply
<b>Software</b>	"Point and Click" user interface (Windows XP or 2000 compatible) Optional "Image Studio" software with advanced features
<b>Standard Lenses</b>	C-mount (1" format); other adapters optional
<b>Camera Size</b>	4.92" x 2.64" x 2.64" (125 x 67 x 67 mm)
<b>Weight</b>	1.87 lb (0.85 kg)
<b>Interface</b>	FireWire (IEEE 1394)
<b>Synchronization</b>	Strobe Out signal (3.3v)

Note: Specs are subject to change at any time

<b>MotionScope M1 Frame Rates and Resolution</b>	
62.5 fps	640 x 512
125 fps	640 x 512
250 fps	640 x 512
500 fps	640 x 512
1000 fps	640 x 512

<b>MotionScope M2 Frame Rates and Resolution</b>	
62.5 to 500 fps	1280 x 1024
125 to 1000 fps	1280 x 512
250 to 2000 fps	1280 x 256
500 to 4000 fps	1280 x 128
1000 to 8000 fps	1280 x 64
2000 to 16,000 fps	1280 x 32

<b>MotionScope M1 Memory</b>		
<b>Memory</b>	<b>Maximum Frames</b>	<b>Record Time at 640x512 - 1000 fps</b>
325 MB (standard)	1024	1 second
650 MB	2048	2 seconds
1.3 GB	4096	4 seconds
2.6 GB	8192	8 seconds

<b>MotionScope M2 Memory</b>		
<b>Memory</b>	<b>Maximum Frames</b>	<b>Record Time at 1280x1024 - 500 fps</b>
325 MB (standard)	256	0.5 second
650 MB	512	1 second
1.3 GB	1024	2 seconds
2.6 GB	2048	4 seconds

### Worldwide Sales and Support

Americas  
tel: +1-800-462-4307  
tel: +1-858-481-8182  
sales@redlake.com

Asia Pacific  
tel: +65-6293-4758  
salesASPAC@redlake.com

Japan  
tel: +81-3-5639-2770  
salesJapan@redlake.com

Europe, Africa and Middle East  
tel: +31-347-324989  
salesEurope@redlake.com

Copyright © 2004 Redlake, MASD, LLC  
All Rights Reserved

MotionScope M1/M2 06/05

