

# /// MotionXtra® HG-SE

Redlake's *MotionXtra*® HG-SE high-speed CMOS camera combines ease-of-use and value for your high-speed motion application. The HG-SE offers maximum resolution of 1280 x 1024 at 500 fps, with frame rates up to 32,000 fps at reduced resolutions.

Specifically designed for rugged environments such as vehicle impact testing, the new innovative *MotionXtra* HG-SE high-speed digital camera architecture puts it in a class by itself. Small and lightweight, the HG-SE features stand-alone battery operation and robust high-G construction.

The *MotionXtra* HG-SE features 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.

The HG-SE's internal battery comes provides up to 30 minutes of standalone operation and up to 4 hours in stand-by mode. Since the HG-SE is self-contained (no bulky processor or tethered cables to contend with) the only connection required is a trigger cable.

Thanks to its intuitive and reliable "point and click" Windows control software, the *MotionXtra* HG-SE is exceptionally simple to set up and operate. Advanced features are included in the standard Image Studio software. The camera is interfaced to your PC via Firewire (IEEE-1394).

## Small and Lightweight High-G Camera



### S N A P S H O T

- Speeds of 500 fps at a full resolution of 1280 x 1024, and up to 32,000 fps at reduced resolutions
- Small (97 x 71 x 71 mm) and lightweight (under 2 pounds/1 kg)
- Internal battery for stand-alone use
- Firewire interface for easy set-up and fast image downloading
- Rugged design to withstand up to 100G in any axis

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

- Vehicle impact testing (VIT)
- On-board vehicle safety component testing
- Military vehicle and ordinance testing
- Remote tests



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## PERFORMANCE SPECIFICATIONS

<b>Resolution</b>	1280 x 1024 pixel (8-bit monochrome or 24-bit color)
<b>Speed</b>	62 to 32,000 frames per second
<b>Exposure Rates</b>	Global Electronic Shutter from 4 µsec to 1/frame rate
<b>File formats</b>	Raw data (Bayer), AVI, BMP, GIF, JPEG, MPEG, TIFF
<b>Frame storage</b>	1024 frames at 1280 x 1024 (2 seconds record time at 500fps)
<b>Memory upgrade</b>	2048 frames at 1280 x 1024 (4 seconds record time at 500fps)
<b>Power</b>	Power via FireWire or 12 vdc power supply
<b>Software</b>	Image Studio for Windows XP or 2000
<b>Standard Lenses</b>	C-mount (1" format); includes F-mount adapter; other adapters optional
<b>Camera Size</b>	3.9" x 2.9" x 2.9" (97 x 71 x 71 mm)
<b>Camera Weight (incl. Standard Battery)</b>	1.87 lb (0.85 kg)
<b>Battery Capacity</b>	Recording mode: 30 min.; standby mode: 4 hours

Note: Specs are subject to change at any time

### MotionXtra HG-SE 1.3 GB Memory - Sample Frame Rates

Resolution	Frame Rate	Number of Frames	Duration
1280 x 1024	500 fps	1024	2 seconds
640 x 512	1000 fps	4096	4 seconds
320 x 256	2000 fps	16,384	8 seconds
320 x 128	4000 fps	32,768	8 seconds
160 x 64	8000 fps	65,536	16 seconds
160 x 32	16,000 fps	262,144	16 seconds
160 x 16	32,000 fps	524,288	16 seconds

### MotionXtra HG-SE 2.6 GB Memory - Sample Frame Rates

Resolution	Frame Rate	Number of Frames	Duration
1280 x 1024	500 fps	2048	4 seconds
640 x 512	1000 fps	8192	8 seconds
320 x 256	2000 fps	32,768	16 seconds
320 x 128	4000 fps	65,536	16 seconds
160 x 64	8000 fps	262,144	32 seconds
160 x 32	16,000 fps	524,288	32 seconds
160 x 16	32,000 fps	1,048,576	32 seconds

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