MotionPro HS-3

Plug'n'Play High Speed Imaging

RedLake's MotionPro HS-3 combines **excellent resolution to frame rate performance**, along with the advanced features you require for accurate high speed motion analysis on your PC or Mac laptop or desktop computer. The MotionPro HS-3 delivers a resolution of 1280 x 1024 with an active-pixel-CMOS sensor with very high frame rates in a compact enclosure.

The MotionPro HS-3 can be used in light critical applications due to the very light sensitive image sensor, the selectable gain and pixel binning.

With the MotionPro HS-3 camera integration could not be easier. Just install the drivers and software, connect one or more HS-3 cameras to USB2.0 ports or hub, and you are ready to capture high speed digital video. Control the system with the feature rich MotionPro Central software or use the LabVIEW or MATLAB plug-in. Or create you own software using the detailed SDK.

Video capture with MotionPro HS-3 cameras may be initiated via software or a wide variety of external triggers including optical, acoustic or electrical, as well as simple hand-held trigger switches.

Flexible recording options allow the user to capture pre-selected numbers of frames before and/or after receiving a trigger or employ a double exposure mode, which, with a 100 nano-second interframe time, is perfect for motion analysis on objects moving at very high speeds. Memory may be divided into multiple sessions with or without automatic download to assure no event is missed.

REDLAKE®

MotionPro HS-3
Performance Specifications

Sensor Array	1280 x 1024 pixels
Max frames at full res.	1,000
Pixel size	12μm
Bit depth (sensor ADC)	10-bit
Sensor Dynamic Range	59dB
Image bit depth	8 bit monochrome or 24 bit colour
Memory	4GB
Configurable binning	1x1, 2x2, 3x3, 4x4
Shutter	Global, 1 microsecond minimum exposure
Trigger	Software or BNC: 3.3v CMOS edge high, edge low, switch closure
Synchronisation	BNC, 3.3v CMOS
Lens Mount	C-mount
Camera Size	95mm x 95mm x 162mm
Camera Weight	1.9Kg
Cable	Standard USB2.0 to 5m, 15m with optional repeater
Multiple Camera Control	Multiple cameras may be networked via USB hub
Operating System	Windows 2000, XP, Mac OS X
Tripod Mount	Standard ¼-20 photo mounts

Note: Specs are subject to change at any time

Sample Frame Rates*

Vertical Resolution	Max horizontal resolution = 1280
1024	1040
768	>1300
512	2000
256	4000
128	80000
64	16,000
32	32,000
16	64,000

*Horizontal resolution does not affect frame rate performance. All HS cameras can record at any frame rate at full horizontal resolution

Accessories

HS Timing Hub	USB digital interface, integrated control software with 8 outputs, 2 inputs
USB repeater	For use up to 15m