

MotionPro X5™

- 4 Megapixel resolution at 250 frames per second
- Small 7 μ pixels reveal the smallest of details
- 500 fps available with Plus upgrade
- MAC OSX and Windows XP Compatible



MotionPro X cameras offer the ultimate in usability and versatility. Our latest developments in CMOS sensor and camera design ensure ideal image quality and the most comprehensive feature set in one efficient package. Included MotionPro software lets you easily optimize camera settings, acquire, analyze, and save images and is also fully integrated with our synchronization, illumination, and data acquisition devices. IDT revolutionizes scientific imaging by offering compatibility among add-on components. Our ingenuity creates solutions.



<http://www.idtvision.com>



National Instruments



The MathWorks



MotionPro X5™

FEATURES LIST

CMOS image sensor

The X5 delivers the ultimate combination of frame rate and resolution. 4 million, 7 μ pixels capture the smallest details in the largest fields of view.

Short-interframe time

Double-exposure mode utilizes a 100 nanosecond interframe time making this the perfect Particle Image Velocimetry (PIV) camera.

XDR

Extended Dynamic Range mode increases the dynamic range of the sensor up to 11 bits.

USB2 and Gigabit Ethernet communication interfaces

Standard communication between the computer and camera is done via USB2. Optional Gigabit Ethernet is available for increased download speeds and use over networks.

Configurable ROI

By reducing the number of horizontal lines in the Region of Interest, the X5 camera is capable of increasing the frame rate to over 50,000 fps.

Flash Memory

Factory settings are stored onboard, making the camera even more portable.

Software Compatibility

MotionPro X Studio includes National Instruments Labview VIs, Matlab plugins, TWAIN, and a C++ SDK.

Live Preview

Full time, live preview on a monitor lets you see what the camera sees.

Video Out

NTSC and PAL

Flexible Triggering

Irig B, Frame-Sync, Trigger-In, and Sync-In connectors onboard camera.

X5 SENSOR SPECIFICATIONS:

Array Format: 2,352H x 1,728V (4,064,256 pixels)

Aspect Ratio: 4:3

Optical Format: 1 inch

Pixel Size: 7.0 μ x 7.0 μ

Pixel Pitch: 7.0 μ

Pixel Fill Factor: 55%

Sensor Imaging Area: 16.46mm H x 12.10mm V – Diagonal 20.43mm

Responsivity: Monochrome 2,500 bit/lux-sec

Shutter: Electronic Rolling Shutter

ADC: On-chip 10 bit

Photo response non-uniformity: 1 % rms

Pixel saturation level: 25,000 electrons

Dark signal non-uniformity: 0.1 % rms

Internal dynamic range: 60 dB

Trigger modes: Internal (continuous), external (edge-low, edge-high, pulse low and pulse high), circular/BROC, set pre- and post-trigger frames

Memory configuration: 2 GB and 4 GB

Minimum inter-frame rate: 100 ns

Digital interface: Plug-and-play with real-time preview, USB-2.0, optional Gigabit Ethernet network

Trigger and synchronization CMOS level: (3.3 V) via BNC connectors

Operating system: Windows 2000, XP, MAC OS X

Integration time: 100 ns to 1000 ms

Programmable gain and offset: 10 bit resolution

Optical interface Standard: C-mount, optional F-mount, optional Canon Mount, converters available

Size/ Weight: 95x95x162 mm, 1.9 Kg

Mount: 1/4-20 photo mount

Power requirements: 100-240 V, 50-60 Hz

Temperature: +5 °C to +40 °C

Humidity: Less than 80% at +31°C



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Specifications subject to change