

MotionPro X3™ INTENSIFIED

- High-Speed digital USB-2 camera system (Monochrome or Color)
- 1.3 Million pixels
- Over 30,000 frames/sec
- 100 nanosecond inter-frame time
- Plug and play with USB-2 interface
- 4GB On-Board Memory



IDT's digital cameras are designed for use in scientific and industrial applications. We provide a full series of camera products for demanding applications requiring either very high resolution or very high framing rate. The cameras, featuring CMOS and CCD image sensors, use standard USB 2.0, IEEE-1394, and Gigabit network interfaces for easy connectivity and do not require a framegrabber. These interfaces are fully supported in laptops and are multi-platform compatible for maximum portability.



<http://www.idtvision.com>



National Instruments



The MathWorks

FEATURES LIST

CMOS image sensor

The X3 delivers a great combination of frame rate and resolution. 1.3 million 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.

USB2 communication interface

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 X3 camera is capable of increasing the frame rate to over 10,000 fps in gated mode of operation.

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.

Flexible Triggering

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

X3 SENSOR SPECIFICATIONS:

Image Intensifier Specifications

**specifications are approximate and subject to change.*

Photocathode Sensitivity

Luminous Sensitivity	795 $\mu\text{A}/\text{lm}$ (minimum)
Quantum Efficiency	35-40%
Wavelength for Peak Sensitivity	500-550 nm
Spectral response	450-900 nm

Photocathode

Window material	7052 Glass
Photocathode material	GaAs
Phosphor material	P-46
Effective output size	18 mm

Stage of MCP	Single
Luminous Gain	20,000 FL/FC
EBI	2.2×10^{-11} lm/cm^2
Limiting resolution	50 line pairs/mm
Image magnification	1

Gate Signal Characteristics

Gate repetition rate	5 KHz single pulse mode, 2.5 KHz dual pulse mode
Level	Positive TTL
Impedance	50 Ω
Minimum separation between consecutive gate events	2 μsecond
Minimum Gate duration	50 nanosecond
Delay ON time	100 nanosecond
ON rise time	40 nanosecond
Delay OFF time	100 nanosecond
OFF fall time	40 nanosecond



WINDOWS XP



FULLY COMPATIBLE