

v7.1 Specifications



Features

Auto exposure
"EDR" Extreme Dynamic Range™
High-g configuration
Optional Continuous data streaming to 2,000pps
Range data input
Continuous recording
Pre-trigger recording
Post-trigger recording
On chip global shuttering
Strobe sync
Segmented image memory
Continuous color video output
IRIG-B timing capture with phase shift
10/100/Gigabit Ethernet

Sensor: 800 x 600 pixel SR-CMOS monochrome, or 24 bit color array, optional 12 bit monochrome available

Sensitivity: 4800 ISO/ASA monochrome, 1200 ISO/ASA color

Pictures per Second (PPS): Full sensor: to 4,800pps, or 512x384 to 10,000pps

Allocated formats: to 160,000pps with "CAR" (Continuously Adjustable Resolution) feature

Exposure Time: Variable, independent of sample rate (pps), to 2 microsecond (1 microsecond sec. option)

Trigger: Continuously variable pre/post

Imager Control: 10/100/Gigabit Ethernet, or RS232 serial interface

Preview and Focusing: Via computer monitor or continuous video out

Lens Mounts: Nikon mount standard. Many other lens mounts available, including C-mount

Inputs/Outputs: (via integrated quick-release connector):

Trigger: Rising/falling TTL pulse w/filter, or switch closure

Sync Image: TTL pulse

Event Marker: TTL pulse or switch closure

Ready Signal: TTL pulse

IRIG-B Timing: IRIG-B code, modulated or unmodulated input, with IRIG-B output, lock, and variable phase shift

Range Data Input

Strobe Sync: TTL pulse

RS232

Network: 10/100/Gigabit Ethernet

Video out: NTSC, PAL or Serial Digital Video "SDI" (available 3Q04)

Power: 24VDC/1.5 Amp

MEMORY

Standard: 1024 Megabytes integral image memory. Records 1,400 images for .3 second of continuous recording at 4,800pps, full format. Longer recording times for lower sample rates and allocated formats. (example: 14.4 seconds at 100pps)

Optional: 2048 Megabyte integral image memory continuously records 2,800 images (.6 sec.) at 4,800pps full frame, and the 8192 Megabyte option will record 11,200 full frame images (2.4 sec.) at 4,800pps full frame.

Optional: Non-Volatile Flash Memory, up to 4 gigabytes

ENVIRONMENTAL

100g up to 10 millisecond
50g up to 100 millisecond
Three axis

SOFTWARE

Phantom® operates in a Windows™ environment with familiar commands found in familiar places. Standard functions include:

Acquisition: Image capture, IRIG-B timing capture & standard time annotation. Field of view & focus. Sample rate & aspect ratio selection. Shutter speed. Histogram. Brightness & contrast, gamma adjust. Trigger modes. Continuous record. Save & recall setups.

Analytical playback: Immediate playback of ciné. Variable playback speeds in forward or reverse, including freeze frame & endless loop. Random Go-to-Image. View single images at random from any ciné. Tile/cascade multiple images on one screen. Timing data displayed with each image. Ciné editor. Multi Ciné Viewer.

Measurements: Linear or angular measurements. Displacement. Velocity. RPMs. 100 data points per image. English and metric units. Generate measurement reports. Report files & images are compatible with spread

sheet software, and image analysis software such as TrackEye®, Image Express®, or Falcon®.

Image processing: Smooth, sharpen, pseudocolor, negative image, and edge detection. Brightness, contrast & gamma adjust. 3x3 and 5x5 filter matrix for custom image processing.

File management: Organize, save, compress and export cinés, or single images. File formats are compatible with most word processing, desktop publishing, and presentation software.

DIMENSIONS

Size: 4.3 x 4.0 x 9.5 inch (HWD)
(12.5 x 11 x 25 cm) (HWD)

Weight: 7 lbs (3.2kg)

Power: 24VDC/ 1.5Amp

Mounting: 1/4-20 inch and four 10-32 threaded hole pattern in base and top

Mounting Axis: Any position

Material & Finish: Machined aluminum housing, powder coat finish

Country of Origin: The United States of America

STANDARD ACCESSORIES

Phantom® software. Single user license*
1024 Megabyte integral image memory*

Ethernet. Sync output pulse, trigger, pretrigger, video out, and IRIG-B

110/220VAC-28VDC International Power Adapter. 12 foot (3.7 m) power cord

One year warranty.

QUESTIONS?

For technical assistance, systems integration, custom options, or information on imaging techniques, please call us toll free:

1 .800.RESOLUTION

(USA & Canada 1.800.737.6588)

For the most up-to-date information, specifications and options, please visit our website:

www.visibleolutions.com

vision
R E S E A R C H

Specifications and features subject to change without notice.

(*Other options available.) Phantom is manufactured in the USA under US patent Number 5625412 and patents pending. Phantom®, EDR®, and Memory Gate® are registered trademark of Vision Research Inc. FireWire® and the FireWire Logo are registered trademarks of Apple Computer Inc. Windows™ and the Windows logo are trademarks of MicroSoft Corporation.

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