v5.0
Specifications

p h a n t o m

IMAGER

Auto exposure
EDR Extended Dynamic Range™
Standard features include:
High-g configuration
High speed image capture
Continuous recording
Pre-trigger recording
Post-trigger recording
On chip shutter
Strobe sync
Integral image memory*
Continuous video viewfinder
IRIG-B timing capture
FireWire™ digital interface
for local or remote system control
of multiple cameras

Sensor:
1024 x 1024 pixel, SR-CMOS color
or SR-CMOS monochrome array

Pictures per Second (PPS): Full sensor:
to 1000 PPS

Allocated formats: to 60,000 PPS

Exposure Time:
Variable, independent of sample rate
(PPS), to 10 microsecond (5µ sec. option)

Post Trigger:
Continuously variable

Imager Controls:
Via FireWire™ digital interface, or
optional RS422/232 serial interface

Viewfinder and Focusing:
Via continuous video viewfinder, or
laptop S-VGA monitor

Lens Mounts: Nikon mount standard.
Many other lens mounts available,
including Photo-Sonics Hi-G lens
mounts

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

Trigger: TTL pulse, or switch closure.

Memory Gate™: TTL pulse

Sync Image: TTL pulse

Event Marker: TTL pulse or switch
closure

IRIG-B Timing: IRIG-B code, modu-
lated or unmodulated input, with
IRIG-B output

RS232/422

Strobe Sync: TTL pulse.

Network: Via FireWire™ digital
interface (IEEE 1394)

Display: Continuous video viewfinder
RS170/CCIR

Power: 28VDC/1 Amp.

MEMORY

Standard: 1024 Megabytes integral
image memory. Records 1,024 images
for 1 second of continuous recording
at 1000 PPS, full format. Longer
recording times for lower sample rates
and allocated formats. (example: 10
seconds at 100 PPS)

Optional: Up to 4096 Megabyte
integral image memory. Records 4096
images for 4.0 seconds continuous
recording at 1000 PPS, full format.
Longer recording times for lower
sample rates and allocated formats.
(example: 40 seconds at 100 PPS)

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

ENVIRONMENTAL (2Q2001)

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 adjust. Trigger modes. Con-
tinuous 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 cine'. Tile/cascade
multiple images on one screen. Timing
data displayed with each image. Ciné
editor.

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.
Unprocessed original ciné is saved as a
separate file.

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: 5x4.5x10 inch (HWD)
(12.5x11x25 cm) (HWD)

Weight: 6 lbs (2.7kg)

Power: 28VDC/ 1Amp

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

Mounting Axis: Any position

Material & Finish: Aluminum housing,
epoxy painted.

Country of Origin: The United States of
America

STANDARD ACCESSORIES

Phantom® software. Single user
license*

1024 Megabyte integral image memory

FireWire® digital interface. Sync output
pulse, trigger, and video out.

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. visiblesolutions.com

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R e s e a r c h