



# Phantom V5.2

One Megapixel, 1000 fps, 12-bit pixel depth:  
A new entry-level standard from VRI

## THE ULTIMATE IN PRICE/ PERFORMANCE

The Phantom V5.1 has been an indispensable member of the Phantom high-speed digital camera family for many years. Now, the V5.1 passes that role to the new Phantom V5.2.

Featuring a full megapixel--1152x896 resolution--in a widescreen format with a full-resolution frame rate of up to 1000 pictures-per-second! At lower resolutions, you can go faster, up to 148,000 pictures-per-second at 96x8. Adjust the resolution in any combination of 96x8 pixels to get the field-of-view and the speed you need.

Available in both monochrome and color models the V5.2 gives you sensitivity rated at 2400 ISO (mono) or 600 ISO (color). Our sensitivity ratings are based on the ISO 12232 standard and are measured without the benefit of any noise reduction filtering which can alter the data in the image. With up to 12 bits of greyscale information for each pixel, you can pull details out of the images that were previously unseen.

With an electronic shutter speed down to  $2\mu\text{s}$ , you can get crisp images free of motion blur on fast-moving objects.

The features you've come to expect on a Phantom V-series camera are all there: Extreme Dynamic Range (dual-slope integration within a single frame), Continuously Adjustable Resolution (in 96x8 increments), Automatic Exposure, multi-cine recording, IRIG timing, and more.



The camera is controlled via Gigabit Ethernet from a PC or laptop. Our Phantom software application, used to setup and control the camera as well as review, edit and save your high-speed images, runs on Windows XP or Vista.

The camera features a video-out port that supports NTSC, PAL, SD-SDI and 720p HD-SDI formats.

Trigger the camera from software, or from external sources. Synchronize multiple cameras to a master camera or external time base.

F-mount lensing allows you to use many popular Nikon format lenses. And, the 16.5mm sensor fits under most C-mount lenses, too. Many lens choices are available from Vision Research. Check out our online store.

Available in 1.5GB, 3GB, 6GB and 12GB versions, there is a model to meet your needs. And, of course, memory upgrades are always available (the 1.5GB version cannot be upgraded.)

The 1.5GB version of the V5.2 is built for hi-g applications and runs cool enough that it does not

require active cooling, the other versions feature active cooling to maintain constant operating temperature and ensure highest picture quality.

Phantom camera training is available at many locations around the world.

Performance, features, price, and risk reduction. What more could you ask for from the leader in digital high-speed imaging? Check out the Phantom V5.2 today!

RESOLUTION	FRAME RATE (FPS)
1152x896	1000
1152x720	1244
1024x512	1885
768x768	1667
768x512	2489
768x384	3305
640x480	2971
512x512	3164
512x384	4197
512x256	6220
256x256	10362
256x128	19704
256x32	59701
128x128	25000
96x64	57971
96x32	88888
96x16	121212
96x8	148148

SPECIFICATION	V5.2
SENSOR SIZE	1,032,192 pixels
RESOLUTION (PIXELS)	1152x896
CONTINUOUSLY ADJUSTABLE RESOLUTION (CAR)	Yes, 96x8
FRAMES-PER-SECOND AT FULL RESOLUTION	1,000 fps
MAXIMUM FRAME RATE	~148,000 fps
EXPOSURE TIME (SHUTTER SPEED)	Minimum: 2µs
BUILT-IN MEMORY	1.5GB, 3GB, 6GB, 12GB
ISO (ISO-12232 STANDARD)	2400 Mono 600 Color
MEMORY SEGMENTATION	Yes, up to 16 segments
PIXEL BIT-DEPTH	8, 10, 12 bits
CAMERA TRIGGER AND SIGNALS	Trigger, Pretrigger (or, MemGate), Sync, IRIG-In & Analog Video are standard. IRIG-Out, Ready, and Event are available.
GB ETHERNET	Yes
VIDEO OUT	PAL, NTSC & HD Component (720p), SD-SDI and 720p HD-SDI
LENSING	F-mount with optional C-mount
OPERATING TEMPERATURE	10°C to 40°C



All specifications are subject to change. (Mar 25, 2008)

**Vision Research, Inc.**  
 T/+1 973-696-4500 F/+1 973-696-0560  
 100 Dey Rd  
 Wayne, NJ 07470 USA  
[www.visionresearch.com](http://www.visionresearch.com)