VisionTM Color

Data Sheet

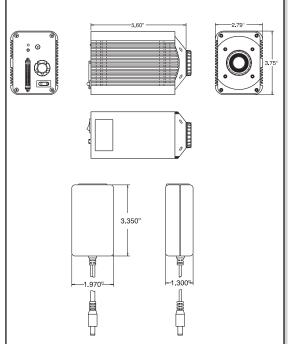




Application

This camera is designed to provide qualitative image capture in both the scientific and industrial work environments.

This camera is used for photodocumentation, pathology, fluorescence, and in industrial and metallurgical applications.



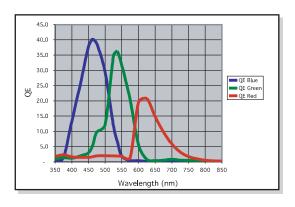
<u>Feature</u> <u>Benefit</u>

36 MHz live mode (dual channel 18MHz) High speed imaging for real time viewing 1600 x 1200 (1.92 Mpixel) image capture .. Resolves fine detail Programmable gain (1-32x) Facilitates live mode previews of low light specimens 8 bit x 18 MHz capture..... Fast acquisition New high quantum efficiency CCD Increases sensitivity for faster image captures Interline progressive scan CCD Electronic shuttering eliminates mechanical shutter shortcomings related to speed, wear, and vibration PCI Interface Stable, high-speed interface for PC and Mac platforms is over 50% faster than Firewire™ (IEEE 1394) SPOT™ Software...... Provides useful tools for modern microscopy Mac® & Windows® operating systems **Basic Applications** Twain & Apple Event DLL w/ SDK and Tutorial manual 3rd Party Driver support





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Captured Frames per Second*

	REGION OF INTEREST		
Binning	1600 X 1200	512 X 512	256 X 256
1 x 1	7.8	16.8	25.4

^{* .04}ms exposure, no post-processing, images saved to RAM on 1.7 GHz P4 running Windows XP

CCD information:

Kodak KAI-2000-CM with cover glass Color mosaic progressive scan interline CCD 1600 x 1200, 7.4 µm square pixels 11.8mm x 8.9mm active area 100x minimum anti-blooming

Digitization information:

Digitized pixel by pixel at CCD sensor Live mode: 8 bit x 36 MHz (Dual channel

8 bit x 18MHz)

Color live image frame rate: 15 -19 frames

per second

Capture mode: 8 bit x 18MHz (see chart for

frame rate)

A/D Converter full scale set to 31,500 e (Gain=1)

Saved bit depths: 24 RGB; 8 bit BW

Noise specifications:

Read noise: 55 e rms

Dark noise: 5.0 e/p/s mean value

Exposure:

40 microsecond to 536 seconds

Captured and live mode automatic exposure Captured and live mode manual exposure

Lens mount: C-mount

Sealing window: IR Filter w/ anti-reflection

Coating

<u>Computer interface:</u> PCI bus card **External shutter control:** BNC TTL level

output

Mechanical:

Tripod mount: 1/4 - 20 UNC

Camera head: 2.79" (71mm) x 3.75" (95mm) x 5.6"

(142mm), 1.4 lbs. (0.62 kg)

Power supply: 1.3" (33mm) x 1.97" (50mm) x 3.35"

(85mm), 0.34 lbs. (0.16 kg)

Operating environment: 0 to 30°C ambient, 0-80%

relative humidity noncondensing

Power requirements: 100-240 VAC, 47-63 Hz

<u>Certifications:</u> CE, FCC Class A, EN60950 <u>SPOT software features:</u>

Color Live mode viewing window, autoexposure live and capture modes, image capture window, predefined and custom image setups, auto white balance, flat field correction, image enhancement, pan and zoom windows, annotation, calibration, measure, sequential image capture and playback, report generator, interactive print dialog, online help menu

File formats:

BMP, TIFF, TIFF-JPEG, JPEG, JPEG-2000, PICT, AVI

TIFF File sizes:

8 bit BW / 1.83MB 24 bit RGB / 5.49 MB

Drivers included:

Twain for supported Windows®

operating systems

AppleEvent for supported Mac®

operating systems

Native drivers for 3rd party software:

Call or visit our website (www.diaginc.com)

Minimum system requirements:

1/2 size PCI bus slot or PCMCIA CardBus slot*
*-Requires Magma™ Adapter (sold separately)

PC: Pentium 166 or greater w/

Windows 95, 98, 00, NT, ME, XP

Mac: Power PC, OS 8.6 - OS X

RAM: 64MB minimum, 256MB suggested Video card: 24 bit RGB @ desired resolution

Items included: Camera head, PCI plug-in board, data cable, power supply cable, power supply, power cord, SPOT software install CD (includes Twain and AppleEvent drivers), user

guide, 1 year warranty