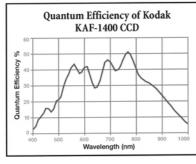
## SPOT & SPOT 2

## **Specifications**

## ■ SPOT Camera: CCD Grades: | Grade 3 Kodak 1400 CCD Total Point Defects ≤ 20 Total Cluster Defects ≤ 8 Total Column Defects ≤ 4 (also available with Grade 2, 1 or 0 CCD) ■ SPOT-2 Camera: Grade 2 Kodak 1400 CCD Total Point Defects ≤ 10 Total Cluster Defects ≤ 4 Total Column Defects ≤ 2 (also available with Grade 3, 1 or 0 CCD) CCD Format ■ 1315 x 1033 pixels

and Resolution:	(1,358,395 pixels) ■ 6.8 micron x 6.8 micron pixel size ■ Active area 8.94mm x 7.02mm		
Image Acquisition Bit Depth:	■ 8 bit and 12 bit grayscale; 24 bit and 36 bit RGB color		
Digitization:	■ Pixel-by-pixel digitization in camera head		
CCD Cooling:	■ Thermoelectric cooler with forced air ■ Cooled to -12°C (37° differential at typical room temperature of 25°C) ■ Temperature stability +/- 1°C in 8 hour period		
Full Scale:	■ 38,250 e (set to 85% of 45,000 e full well capacity)		
Dark Current:	■ 0.05 e/p/s at -12°C (typical) ■ 0.2 e/p/s at -12°C (max)		
Read Noise:	vise: ■ 13 e rms (typical) 20 e rms (max)		
Quantum Efficiency of Kodak KAF-1400 CCD			



Signal to Noise	■ 69 dB (typical)	Software and	■ For Windows 95/98/NT
Ratio:	66 dB (min)	Operating System:	(Mac version pending)
			proprietary software
Binning Modes:	$\blacksquare 2x2, 3x3, 4x4$		environment includes:
		,	•Auto exposure • Auto white
Color & IR Filter:	■ SPOT Camera: fixed		balance • Image database
	■ SPOT-2 Camera: on slider		•Report generator • Calibra- tion mark imprinting
0	= 100/ 000/ relative humidity		• Distance, area and angle
Operating Environment:	■ 10%-80% relative humidity ■ 15-30°C ambient		measurement • Editing
Environment.	■ 15-50°C ambient		tools (histogram, sharpen,
Pixel Readout	■ 1.08 MHz		gamma, ect.) • Annotation
Rate:	= 1.00 Mills		•Flatfield correction • Back-
30.		25	ground subtract • Twain
Exposure:	■ Choice of auto or manual		driver • Device driver
	exposure settings, exposure		available for several image
	range 80ms-17 minutes	340	analysis programs  For Mac Power PC:
	per color		Twain driver (for use
Lens Mount:	■ Nikon "F" bayonet mount		with Adobe Photoshop
Lens Mount.	(adapters available for		and other Twain compliant
	almost all new and older		software)
	microscopes), can accept		_ n _ i _ i _ i /nicc
	Nikon macro lenses	Computer Requirements	■ Pentium required (P166
		PC:	or faster recommended) ■ 64MB RAM required
Window:	■ SPOT-2 has special ultra-	10.	(128MB recommended)
	broad band anti-reflection		■ Video card should provide
	coating on all clear windows (under 1% reflec-		24 bit RGB "millions of
	tion from 420nm to 820nm)		colors" at desired monitor
	100 110111 12011111 10 0201111,		resolution (8MB VRAM
Fast Focus:	■ 4 subframes per second		required for recommended
	(typical)		21" monitor operating at
1000			1600 x 1200 resolution)
File Sizes:	■ 8 bit = 1.33 MB	Computer	■ Power PC with a PCI
	■ 12 bit = 1.99 MB ■ 16 bit = 2.66 MB	Requirements	bus running MAC OS 7.6
	■ 16 bit = 2.66 MB ■ 24 bit = 3.98 MB	MAC:	or greater
	■ 36 bit = 5.98 MB		■ 64MB RAM required
	■ 48 bit = 7.97 MB		(128MB recommended)
			■ Video card should provide
Computer	■ PCI Bus		"millions of colors" at
Interface:			desired monitor resolution (8MB VRAM recommended
			for resolution of 1280 x 1024
External Shutter	■ BNC connector on PCI		at refresh rate of 70Hz)
Control:	plug-in board; TTL level output for shuttering		
	fluorescence illuminator	Camera Head:	■ SPOT Camera:
			Dimensions:
Power Supply:	■ Factory configurable to		5.0"H x 7.0"W x 7.25"D

**Power Supply:** 

■ Factory configurable to

100V, 120V, 220V or

5.0"H x 10.5"W x 8.0"D

230V, 50/60Hz

■ Dimensions:

■ Weight: 12 lbs.

Weight: 7 lbs.

■ SPOT-2 Camera:

5.0"H x 7.0"W x 7.25"D

Dimensions:

Weight: 7 lbs.