The SPOT[™] Pursuit Color digital camera delivers optimized sensitivity for low light color imaging applications at an incredible price. This compact camera provides 14-bit digitization with multiple readout speeds for recording dynamic events. Its cooled CCD sensor provides high quantum efficiency, especially in the near-IR portion of the spectrum. The recommended applications for the SPOT Pursuit Color include brightfield color imaging, GFP imaging, polarization/DIC studies, immunofluorescence, ion tracking, and colocalization experiments.

The SPOT Pursuit Color includes SPOT Basic software (Windows® and Mac® OS) for real-time image preview and acquisition. Drivers are available for third party imaging software applications, and a Software Development Kit (SDK) is available at no charge for easy integration with custom applications. Advanced triggering enables precise synchronization with peripherals. USB 2.0 connectivity affords effortless installation on computers and laptop portability.



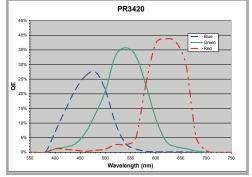
Features	Benefits
>10 fps Image Capture	High speed, high resolution image capture
8 e⁻ Read Noise	Excellent low light detection limit and SNR
USB 2.0	Plug and play cable connection, no frame grabber card needed
-25° C Cooling	Suppresses dark current noise
Mac [®] and Windows [®] OS	Choose your OS environment



Specifications				
Resolution	1.4 Mp			
Sensor Type	Sony ICX285AK CCD color mosaic			
Shutter	Global electronic			
Active Pixels	1360 x 1024			
Pixel Size	6.45 μm x 6.45 μm			
Optical Format	2/3"			
Active Imager Size	8.77mm (H) x 6.60mm (V) 10.97mm diagonal			
Exposure Time	0.5ms – 1500sec			
Anti-Blooming	100x minimum			
Binning	2 x 2, 3 x 3, 4 x 4, 8 x 8			
Region of Interest	User selectable, 50 x 50 to full resolution			
Read Noise	8 e- RMS typical			
Dark current	0.045 e/p/s			
Full Well Depth	>16,000 e- (no binning) >24,600 e- (with binning)			
Non-linearity	<1%			
A-D Converter	14-Bit @ 20 MHz DCS			
Saving Bit Depth	8, 12 or 16 bits/channel (24, 36 or 48 bit color)			
Analog Gain	0.65, 1			
Cooling	-25° C differential from ambi- ent via computer controlled fan cooled thermoelectric cooler with hermetically sealed, fan cooled heat sink			
Lens Mount	C-mount			
Computer Interface	USB 2.0			
Triggers	Camera ready output (TTL) External trigger input (TTL) Exposure sync output (TTL)			
Tripod Mount	1/4"-20 (sold seperately)			
Weight	2.4 lbs (1.09 kg)			
Size	5.5" W x 4.3" D x 2.7" H (139mm x 109mm x 68mm)			
Power Requirements	100-240 VAC 1A			
Operating Environment	0 to 50°C, 95% relative humidity (non-condensing)			
Storage Temperature	-20 to 60°C			
Certifications	CE, FCC Class A, EN60950, RoHS			

Quantum Efficiency

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Captured Frame Rates Captured Frames per Second *

Binning level	Region of interest					
	1360x1024	640x480	512x512	256x256	50x50	
None	10.9	21.5	20.5	36.2	92.4	
2 x 2	20.1	37.3	35.9	58.3	114.0	
3 x 3	28.0	49.4	48.2	73.8	124.6	
4 x 4	34.8	59.2	57.7	84.6	130.0	
8 x 8	55.3	83.6	83.2	108.7	138.8	

*1ms exposure with post-processing deferred, taken with 2.6 Ghz Xeon processor running Windows XP. Capture rates on other computers OS platforms may vary.

SPOT Software				
SPOT Basic Software	Color live mode viewing	window with controls		
Features	Image capture window			
	Image capture setups are user defined, named and saved			
	Auto or manual exposure for Live and captured images			
	Auto white balance			
	Spot or average metering			
	Flatfield correction			
	Annotation			
	Calibration mark			
	Measurement tools			
	Image enhancement tools			
	Sequential image capture and playback			
	Report generator			
	Interactive print dialog			
	Help menu	in a su Otana david		
	3rd Party Software Interface: Standard Twain for Windows®, SPOT Image Capture Application & Apple Event for Mac®			
Computer Operating	Windows®: XP SP3 (32-bit), Vista (32 or 64-bit), 7 (32 or 64-bit) and 8 (32 or 64-bit)			
System Compatibility	Mac®: OS 10.6 - 10.8			
	PC: 1GHz Pentium 4 (or equivalent x86 SSE2 processor), 1 GB RAM, USB 2.0 port			
Minimum Computer Requirements	Mac®: Intel processor, 1 GB RAM, USB 2.0 port			
	Mac® and PC video: 24-bit color @ 1024 x 768 resolution			
SPOT Advanced Software	Available (includes macro feature, floating taskbars, custom dialogs and image archiving database)			
SPOT Advanced Software Modules (Optional)	Available (adds image display intensity scaling, peripheral device control, extended depth of focus and extended third party interface)			
Software Development Kit	Available for Mac® and Windows®			
Items Included				
Camera Head	With lens cap			
USB2 Cable	Carries data			
Power Supply	With power cord, 5.91" (150mm) x 2.76" (70mm) x 1.38" (35mm), 1.36 lbs. (600g)			
Quick Start Installation Guide	Instructions on how to get up and running quickly			
Software CD	Includes SPOT Basic software and User Guide			
Warranty	2 years from date of purchase			
Catalog Number	C-Mount	F-Mount		
Pursuit 1.4 Mp USB Color	PR3420	NA		
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Specifications are typical and subject to change.



SPOT Imaging Solutions[™] A division of Diagnostic Instruments, Inc.

6540 Burroughs Avenue • Sterling Heights • MI • 48314-2133 phone: 586.731.6000 • fax: 586.731.6469 • website: www.spotimaging.com Data Sheet: Pursuit 1.4 USB Color