The SPOT™ Idea camera delivers 12-bit high quality images for the serious microscopist at a low price. The SPOT Idea produces 5.0 megapixel resolution in vivid colors, enhancing publications, documentation and archiving. The SPOT Idea is an excellent choice for pathology, as well as clinical, life and material science, measurement, educational, and industrial applications.

The SPOT Idea includes SPOT Basic software (Windows® and Mac® OS) which features real time image previewing, scale bar addition, report generation, time lapse, and measuring capabilities. Its USB 2.0 interface enables "plug-and-play" installation, and trigger options provide precise synchronization with peripherals. SPOT Idea cameras come with a 2-year warranty and are supported by an experienced team of imaging specialists.





Features	Benefits
5.0 Mp Images	Resolves fine image detail
Real time Live mode	Frame and focus in real time 76 fps at 640 x 480 ROI at full resolution 28 fps, full frame at 1/2 resolution 7 fps, full frame at full resolution
Auto and Manual exposure control	Let the software compute the exposure time and gain or set them yourself
USB 2.0	Single cable connection provides effortless installation, reduces cable clutter and enhances laptop portability (no power supply or frame grabber card needed)
SPOT Basic Imaging Software	Provides essential tools for modern microscopy
Mac® and PC	Compatible with both Mac® and Windows® computers



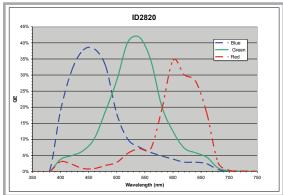
## Sensor Resolution 5.0 Mp CMOS, color mosaic, Bayer pattern Sensor Type Rolling shutter with single frame capture Shutter Active Pixels 2592 x 1944 Pixel Size 2.2µm x 2.2µm Optical Format 1/2.5" (4:3) 5.70mm (H) x 4.28mm (V) 7.13mm diagonal Active Imager Size Exposure Time 44µs – 15sec Variable Resolution User selectable Region of Interest User selectable Read Noise 6.5 e<sup>-</sup> rms Full Well Depth 7,600 e Non-linearity <1% 8, 10 or 12 bits/channel (24, 30 or 36 bit color) Bit Depth Sensor Readout 72MHz (into camera frame buffer) Frequency

Camera				
Lens Mount	C-mount			
Computer Interface	USB 2.0			
Trigger Connectors	Sync output (TTL) External trigger input (TTL)			
Tripod Mount	1/4"-20, stainless steel threads			
Weight	1.31 lbs (295g)			
Size	4.05" W x 3.05" D x 1.40" H (103mm x 77mm x 36mm)			
Power Consumption	2W from USB cable			
Operating Environment	0 to 50°C, 95% relative humidity (non-condensing)			
Storage Temperature	-20 to 60°C			
Certifications	CE, FCC Class A, EN60950 RoHS			

1, 2, 4 and 8

## **Quantum Efficiency**

Analog Gain



## Captured Frame Rates Captured Frames per Second \*

Live Mode (frames per second)						
Region of Interest	2592x1944	1296x972	640x480	256x256	50x50	
Full Res	7	28	76	149	180	
1/2 Res	28	78	157	190	191	
1/4 Res	56	112	137	137	138	
Sequential Image Capture (frames per second)						
Full Res	4	16	63	151	180	
1/2 Res	16	62	159	191	194	
1/4 Res	56	113	137	138	138	

<sup>\*</sup> Frame rates measured with 44µs exposure time on 2GHz Intel Dual Core Xenon processor running Windows XP. Post-processing was deferred on sequential images. Frame rates may vary on other processors and operating systems.

## **SPOT Software**

SPOT Software					
SPOT Basic Software Features	Color Live mode viewing window with controls				
	Image capture window				
	Image capture setups are user defined, named and saved				
	Auto or manual exposure for Live and captured images				
	Zoom control on Live and captured images Auto white balance				
	Spot or average metering				
	Correct Color Technology™ using ICC/ColorSync corrections				
	Flatfield correction				
	Annotation				
	Calibration mark				
	Measurement tools				
	Image enhancement tools				
	Sequential image capture and playback				
	Report generator				
	Interactive print dialog				
	Help menu				
	3rd Party Software Interface: Twain for Windows®, SPOT Image Capture Application & AppleEvent for Mac®				
Computer Operating System Compatibility	Windows®: XP SP3 (32-bit), Vista (32 or 64-bit), 7 (32 or 64-bit) and 8 (32 or 64-bit) 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 and image archiving database)				
SPOT Advanced Software Modules (Optional)	Available (adds image display intensity scaling, peripheral device control and extended depth of focus)				
Software Development Kit	Available for Mac® and Windows®				
Native Drivers for 3rd Party Software	Available (call or visit our website)				
Items Included					
Camera Head	With lens cap				
USB2 Cable		ata and power			
Quick Start Installation Guide	Carries both data and power  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	Idea 5.0 Mp	ID2820			
	Specifications a	re typical and subject to change			



Specifications are typical and subject to change.

