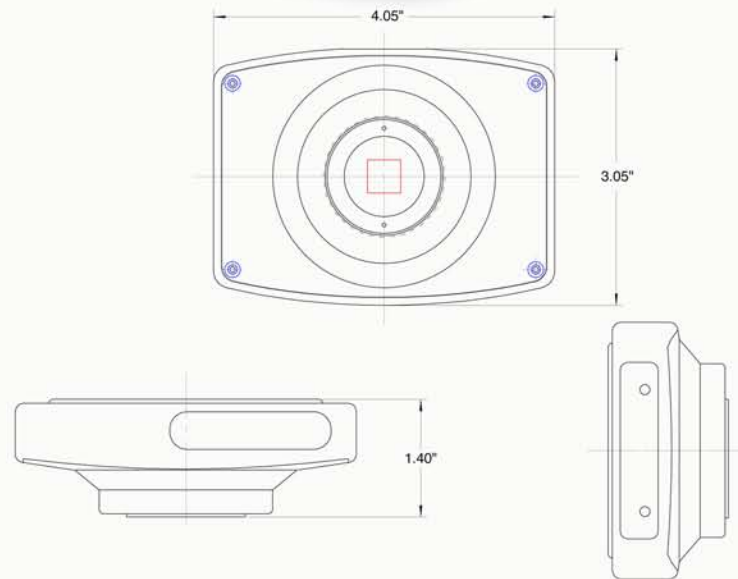


The SPOT™ Idea™ 1.3 Megapixel camera is designed to deliver high impact digital images for the serious scientist/microscopist in a value-laden package. The SPOT Idea produces megapixel resolution in vivid colors, enhancing publications, documentation, and archiving. The SPOT Idea is an excellent choice for pathology, as well as clinical, life and material science, measurement, educational, and industrial applications.

Every SPOT Idea camera is packaged with easy-to-use, yet powerful SPOT software. Together with full compatibility in both Mac® and PC (including Vista®) environments, the SPOT Idea is a most versatile and efficient image capture system. With a multitude of embedded software functions and a clear software upgrade path, this is a digital imaging system for today and tomorrow.



# idea™ CMOS | 1.3 MP



## Features

## Benefits

1.3MP Images

Resolves fine image detail

Real time Live mode

Frame and focus in real time  
78 fps, zoomed in to 640 x 480 ROI at full resolution  
31 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



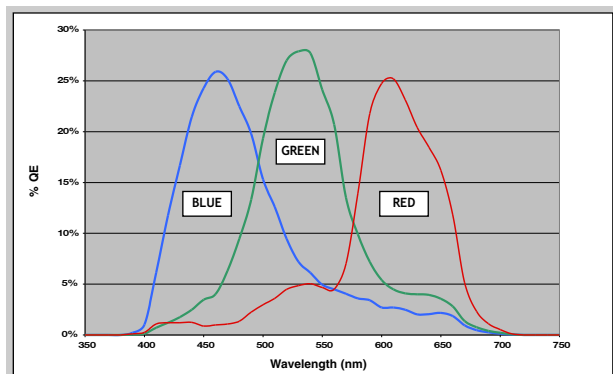
## Sensor

Resolution	1.3MP
Sensor Type	CMOS, color mosaic, Bayer pattern
Shutter	Rolling shutter with single frame capture
Active Pixels	1296 x 972
Pixel Size	4.4µm x 4.4µm
Optical Format	1/2.5" (4:3)
Active Imager Size	5.70mmH x 4.28mmV 7.13mm diagonal
Exposure Time	31µs – 15sec
Variable Resolution	User selectable
Region of Interest	User selectable
Read Noise	23.5e RMS
Full Well Depth	28,500e
Non-linearity	<1%
Bit Depth	8, 10 or 12 bits/channel (24, 30 or 36 bit color)
Sensor Readout Frequency	72MHz (into camera frame buffer)
Analog Gain	1, 2, 4 and 8

## Camera

Lens Mount	C-mount
Computer Interface	USB 2.0
Trigger Connectors	External trigger input Sync output
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

## Quantum Efficiency



## Frame Rates

Region of Interest	1296x972	640x480	256x256	50x50
<b>Live Mode (frames per second)</b>				
Full Res	31	78	157	192
1/2 Res	56	114	137	137
<b>Sequential Image Capture (frames per second)</b>				
Full Res	17	65	159	194
1/2 Res	57	115	138	139

Frame rates measured with 31µs 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 Basic Software Features	<ul style="list-style-type: none"> <li>Color Live mode viewing window with controls</li> <li>Image capture window</li> <li>Image capture setups are user defined, named and saved</li> <li>Auto or manual exposure for Live and captured images</li> <li>Zoom control on Live and captured images</li> <li>Auto white balance</li> <li>Spot or average metering</li> <li>Correct Color Technology™ using ICC/ColorSync corrections</li> <li>Flatfield correction</li> <li>Annotation</li> <li>Calibration mark</li> <li>Measurement tools</li> <li>Image enhancement tools</li> <li>Sequential image capture and playback</li> <li>Report generator</li> <li>Interactive print dialog</li> <li>Help menu</li> <li>Drivers: Twain for Windows®, 3rd Party Interface for Mac®</li> </ul>
Computer Operating System Compatibility	Mac®: OS X v10.3.9 - v10.5 Windows®: 2000, XP, Vista®
Minimum Computer Requirements	Mac®: 400MHz Power PC, 512MB RAM, USB 2.0 port PC: 1GHz Pentium, 512MB 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 data base)
Spot Advanced Plus Software	Available (adds image display intensity scaling, peripheral device control and extended depth of focus)
Software Development Kit	Available for Mac®, Windows® and Linux
Native Drivers for 3rd Party Software	Available (call or visit our website)

## Items Included

Camera Head	With lens cap
USB2 Cable	Carries both data and power
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

## Ordering Information

Catalog Number ID2920

Mac® is a registered trademarks of Apple Inc.  
Windows® is a registered trademark of Microsoft.  
Specifications are typical and subject to change.



**DIAGNOSTIC**  
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