

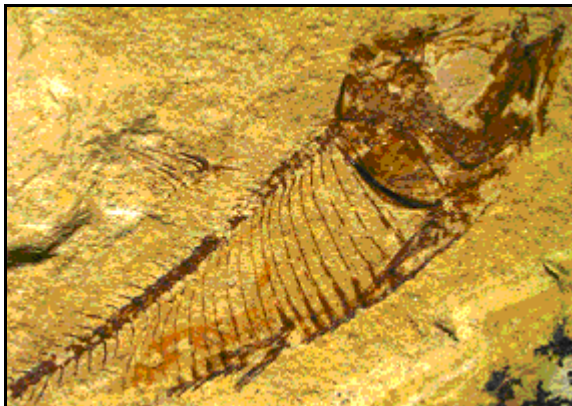


### 3.1 Megapixel CMOS USB 2.0 Camera

High Resolution CMOS Color  
Microscopy Camera for Qualitative Image Archiving

## Outline

Lumenera's INFINITY 1-3 digital camera is designed to be a cost-effective, versatile solution for documentation and archiving of clinical, life science, material science images where higher resolution is routinely required. With 2048x1536 resolution and on-board processing, the INFINITY 1-3 delivers outstanding image quality for a wide variety of scientific applications.



Live video preview provides for real-time focus, while auto exposure and auto white balance efficiently capture your optimal image. An intuitive user application provides camera controls, while full integration to popular third-party imaging applications is available through our TWAIN drivers.

The USB 2.0 digital interface ensures a simple plug and play installation – and one standard cable minimizes camera clutter. No framegrabber required.

INFINITY 1-3 is supported by an experienced team of technical support and imaging experts. We understand your imaging needs and are here to help you get the most out of your camera.

## Performance Features

- ❑ **The high-speed USB 2.0 interface eliminates a framegrabber and facilitates ease of installation on both laptop and desktop computers**
- ❑ **The low noise characteristic of the INFINITY 1-3 progressive scan 3.1 megapixel image sensor results in crisp color quality for the most demanding brightfield and darkfield microscopy applications including clinical pathology and cytology, life science and geology**
- ❑ **Full color sub-windowing allows for rapid focus and scanning of samples: 10 fps at full 2048X1536 resolution and 60 fps at 640x480 resolution**
- ❑ **Select 8 & 10-bit pixel Data modes**
- ❑ **The RGB data captured through each pixel contains 30-bits of color image information resulting in 1024 intensity values**
- ❑ **Camera control through an intuitive user TWAIN interface results in rapid image capture archiving and documentation for high throughput applications, demanding research environments and teaching facilities**
- ❑ **The INFINITY 1-3 has a compact design equipped with a C-Mount facilitating installation on all microscope configurations including upright, inverted and stereo**
- ❑ **INFINITY 1-3 cameras are software compatible with Windows™ 98 SE, Windows ME, Windows 2K and Windows XP operating systems**

# Specifications

# INFINITY1-3

## Camera Sensor

Image Sensor	1/2" format, CMOS, color, 6.5mm x 4.9mm array
Effective Pixels	2048 x 1536, 3.2um square pixels
Frame Rate	6 fps at 2048x1536, 60 fps at 640x480
Dynamic Range	>60dB
Digital Output	8 and 10-bit uncompressed
Read Noise	20 e- rms

## Camera Controls

Mass	300g
Power Requirement	USB bus power, or external 5VDC - 500mA
Power Consumption	~2.5Watts
Operating Temperature	0° C to +50° C
Operating Humidity	5%-95%, Non-condensing
Integration Time	1/1000 to 3 sec.
Shutter	Rolling shutter with single frame capture
ROI	User Selectable
Auto Exposure	Automatic / Manual
White Balance	Automatic / Manual
Gain	Programmable / 1 to 10X optimizable
Interface	USB 2.0 high-speed interface
Dimensions (L x W x H)	3.85 x 2.00 x 2.75 inches
Lens Mount	C-Mount lens adapter

## Recommended PC Specs:

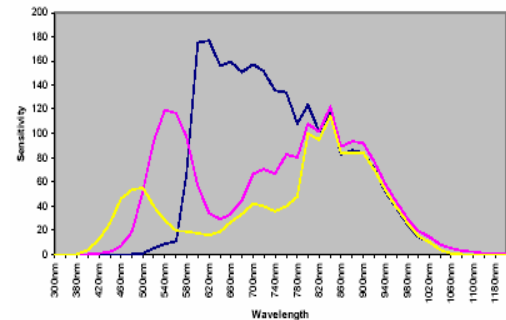
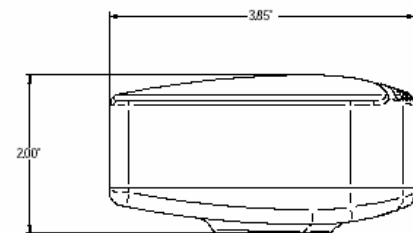
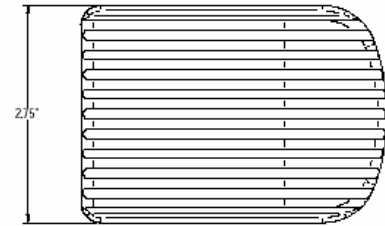
- Pentium 4, 1.3GHz or higher
- 512Mb RAM
- 60 GB hard drive free space or more
- USB 2.0 Port
- Windows 2000 or XP

## Minimum PC Specs:

- 600MHz Processor
- 256Mbytes of SDRAM
- 20GB hard drive free space
- USB 2.0 Port
- Windows 98 or ME

## Product Includes:

- INFINITY 1-3 digital camera for USB 2.0
- CD-ROM with INFINITY user application software
- TWAIN driver
- Documentation
- USB 2.0 cable



## Ordering Information

INFINITY 1-3C – Color Camera

**Full customization available  
to meet your exact needs!**

**WWW.OEM-OPTICAL.COM / WWW.OEM-OPTICAL.NET**