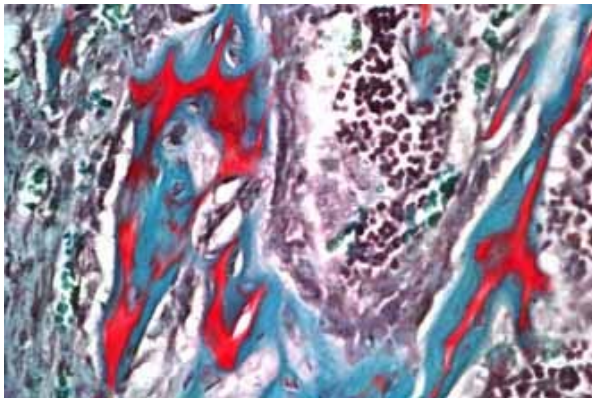




- **32 Megapixel CCD USB 2.0 Camera**
- **Sub-Pixel Detail**
- **Incredible Color Accuracy**
- **Excellent Sensitivity**

## Outline

The INFINITYX-32 offers incredible flexibility in capturing images at 2, 8, 16 and 32 megapixel resolution. Using the patented DeltaVu™ technology, each CCD pixel captures full chromatic information, resulting in increased color resolution with no degradation. The INFINITYX-32 is the first pixel shifting camera to utilize the highly sensitive SONY ICX274 sensor. The relatively low cost of the INFINITYX-32 makes it an affordable tool for clinical, life and material sciences where megapixel resolution, color accuracy, and light sensitivity are essential.



Live video preview provides for real-time focus, while auto exposure and auto white balance help efficiently capture your optimal image. Software control provides exposures from 67us through to 2 seconds.

An intuitive user application provides camera control, while full integration to popular third-party imaging applications is available through our TWAIN drivers.

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

The INFINITYX-32 includes INFINITY ANALYZE software for advanced camera control, image processing, measurement and annotation.

## Performance Features

- ❑ **32 megapixel resolution is achieved through shifting a color or monochrome sensor with a 1616X1216 pixel array**
- ❑ **Users will have the flexibility of choosing between 2, 8, 16 and 32 megapixel resolution on capture, taking full advantage of their microscope optics**
- ❑ **Highly sensitive, low noise CCD with remarkable color quality for the most demanding applications**
- ❑ **Full color sub-windowing allows for rapid focus and scanning of samples: 12 fps at full 1616X1216 resolution, 25 fps at smaller regions of interest**
- ❑ **8 / 12-bit selectable output format**
- ❑ **The RGB data captured through each pixel contains 36-bits of color image information resulting in 4096 intensity values per color**
- ❑ **Camera control through INFINITY CAPTURE, an intuitive user interface, resulting in rapid image capture, archiving and documentation for high throughput applications**
- ❑ **INFINITY ANALYZE software for advanced camera control, image processing, measurement, annotation and archiving**
- ❑ **Easy and flexible installation on your PC through a standard, high-speed USB 2.0 interface**
- ❑ **INFINITYX-32 cameras are software compatible with Windows 2K, Windows XP and Windows Vista operating systems**
- ❑ **Full one (1) year warranty**

# Specifications

# INFINITYX-32

## Camera Sensor

Image Sensor	<b>1/1.8" Interline Sony ICX274 2.0 megapixel color or monochrome progressive scan CCD sensor</b>
Effective Pixels	<b>1616 x1216, 4.4µm square pixels</b>
Digital Output	<b>8 and 12-bit uncompressed</b>
Frame Rate	<b>12 fps at 1616x1216, 25 fps at 640x480</b>
Dark Current (e-/s)	<b>12 e-</b>
Dynamic Range	<b>&gt;66dB</b>

## Camera Controls

Integration Time	<b>.067ms to 2 seconds</b>
Shutter	<b>Global Electronic Shutter</b>
Auto Exposure	<b>Automatic / Manual</b>
White Balance	<b>Automatic / Manual</b>
Gain	<b>Programmable / 1 to 10X</b>
Lens Mount	<b>Adjustable C-Mount lens adapter</b>

## Operational Specs

Dimensions (L x W x H)	<b>3.85 x 2.00 x 2.75 inches</b>
Mass	<b>300g</b>
Power Requirement	<b>USB bus power, or external 5VDC – 2.5A</b>
Power Consumption	<b>~2.5Watts</b>
Operating Temperature	<b>0°C to +50°C</b>
Operating Humidity	<b>5%-95%, Non-condensing</b>

## Digital Video Resolution

1616 X 1216
1280 X 1024
808 X 608 (Binning 2x2)
640 X 480
404 X 304 (Binning 4X4) Mono
320 X 240

## Digital Video Frame Rate

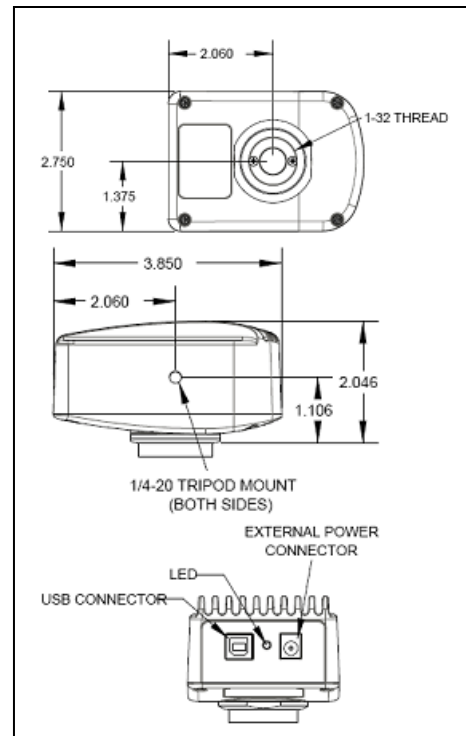
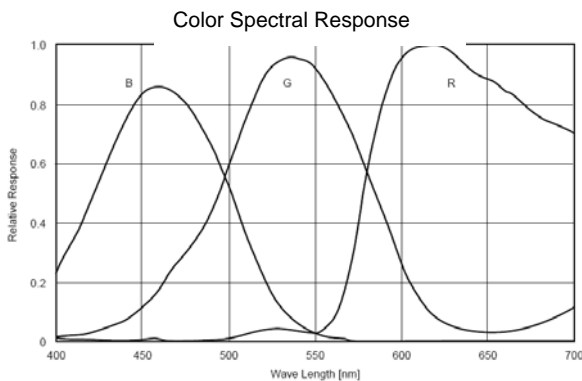
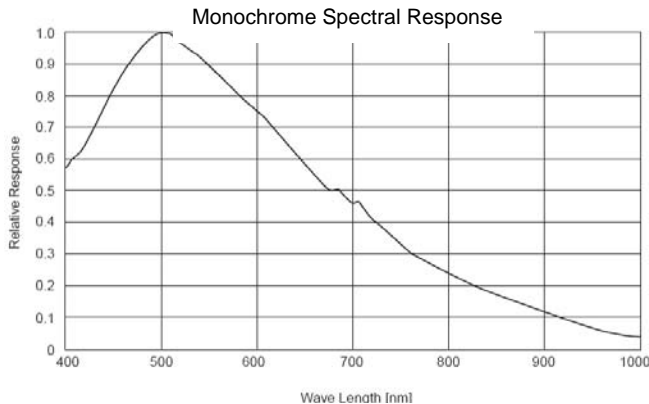
12 frames per second
14 frames per second
21 frames per second
25 frames per second
37 frames per second
39 frames per second

## Digital Still Image

1616 X 1216 Demosaic / 2 Meg	24 bit RGB: 5.6 MB
3232 X 2432 / 8 Meg	24 bit RGB: 22 MB
4848 X 3648 / 16 Meg	24 bit RGB: 50 MB
6464 X 4864 / 32 Meg	24 bit RGB: 90 MB

## Computer Interface

Data Interface	High-Speed USB 2.0
Cable	Standard USB 2.0
Application Interface	INFINITY ANALYZE and INFINITY CAPTURE Software
Application Support	TWAIN for 3 <sup>rd</sup> party integration



## Ordering Information

INFINITYX-32C	– Color Camera
INFINITYX-32M	– Monochrome Camera
Lu8101	– Power Supply with international adaptors (included)

## Recommended PC Specs:

- Pentium 4, 1.3 GHz or higher
- 512MB RAM
- +60MB hard drive free space
- USB 2.0 port
- Windows 2000, XP and Vista

## Minimum PC Specs:

- 600MHz Processor
- 256 MB of SDRAM
- 20MB hard drive free space
- Windows XP or 2K

## Product Includes:

- INFINITYX-32 USB 2.0 digital camera
- CD-ROM with INFINITY software
- TWAIN driver
- Documentation
- USB 2.0 cable
- Power supply with international adaptors