Lumenera corporation

INFINITY2-3

3.3 Megapixel CCD USB 2.0 Camera

High Resolution CCD Color
Microscopy Camera for Qualitative Image Archiving

Outline

Performance Features

Lumenera's INFINITY*2-3* digital CCD color camera offers excellent sensitivity and high resolution. This is an ideal camera for brightfield, darkfield, and DIC imaging applications where higher resolution archiving and a wide dynamic range are routinely required. With 2080 x 1536 resolution and on-board processing, the INFINITY*2-3* delivers outstanding image quality for a wide variety of scientific applications.
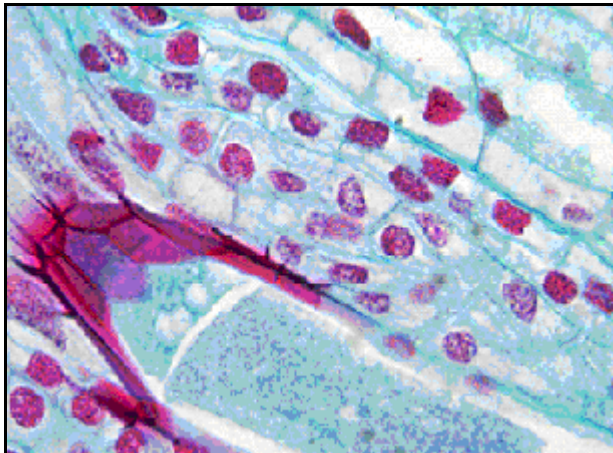
Live video preview provides for real-time focus while auto exposure and auto white balance efficiently capture your optimal image. An intuitive user application provides camera controls while full integration to popular third-party imaging applications is available through our TWAIN drivers.

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

The INFINITY*2-3* camera 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.

- ❑ **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*2-3*, 3.3 megapixel CCD image sensor results in crisp color quality for the most demanding brightfield and darkfield microscopy applications including clinical pathology and cytology, histology, life science and geology**

- ❑ **Full color sub-windowing allows for rapid focus and scanning of samples: 5 fps at full 2080X1536 resolution**

- ❑ **Select 8 and 12-bit pixel data modes**

- ❑ **The RGB data captured through each pixel contains 36-bits of color image information resulting in 4096 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*2-3* has a compact design equipped with a C-Mount, facilitating installation on all microscope configurations including upright, inverted and stereo**

- ❑ **INFINITY*2-3* cameras are software compatible with Windows™ 98 SE, Windows ME, Windows 2K and Windows XP operating systems**

Specifications   INFINITY2-3

Camera Sensor

Image Sensor	1/1.8" Interline Sony ICX262 3.3 megapixel color progressive scan CCD sensor
Effective Pixels	2080 x1536, 3.45μm square pixels
Frame Rate	5 fps at full resolution, higher fps with binning and ROI
Digital Output	8 and 12-bit
Read Noise	12 e- rms
Readout Frequency	22.5 MHZ
Dimensions (W x H x D)	2.25 x 3.85 x 1.56 inches (enclosed)

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 16 sec.
Shutter	Interlaced
ROI	User Selectable through mouse click and drag
Auto Exposure	Automatic / Manual
White Balance	Automatic / Manual
Gain	Programmable / 1to 10x optimizable
Interface Connector	Standard 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
Binning Options	2x2, 3x3, 4x4

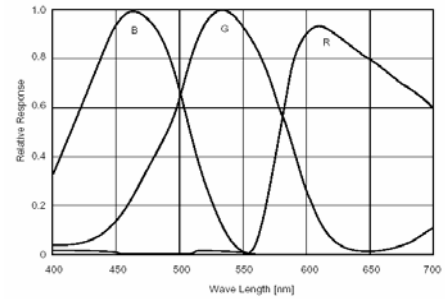Color Response Curve

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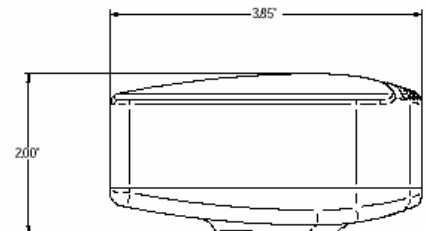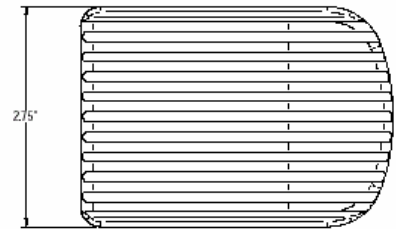- USB 2.0 Port
- Windows 2000 or XP

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

Product Includes:
- INFINITY2-3 digital camera for USB 2.0
- CD-ROM with Infinity user application software
- TWAIN driver
- Documentation
- USB 2.0 cable

Ordering Information

INFINITY*2-3*C – Color Camera

INFINITY*2-3*M – Monochrome Camera

Full customization available to meet your exact needs!

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