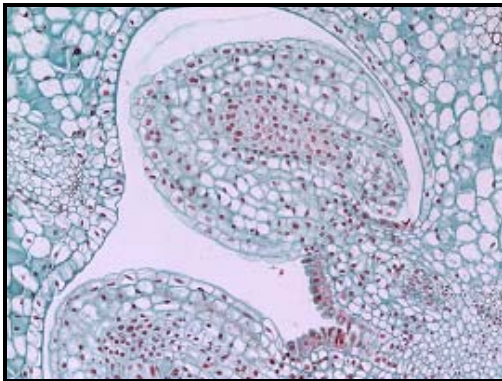# Lumenera corporation

INFINITY2-2

2.0 Megapixel CCD USB 2.0 Camera

High Resolution CCD Color or Monochrome
Microscopy Camera for Qualitative Image Archiving

Now includes
INFINITY ANALYZE Software!

Outline

Lumenera's new INFINITY2-2 digital CCD color or monochrome 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 1616X1216 resolution and on-board processing, the INFINITY2-2 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.

NEW this year, every INFINITY camera now includes INFINITY ANALYZE software for advanced camera control, image processing, measuring and annotation.

The INFINITY2-2 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.

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 INFINITY2-2, 2.0 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: 12 fps at full 1616X1216 resolution, 30 fps at smaller regions of interest**

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

❑ **The RGB data captured through each pixel contains 30-bits of color image information resulting in 1024 intensity values per color**

❑ **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 INFINITY2-2 has a compact design equipped with a C-Mount, facilitating installation on all microscope configurations including upright, inverted and stereo**

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

Specifications   INFINITY*2-2*

Camera Sensor

Image Sensor	**1/1.8" Interline Sony ICX274 2.01 megapixel color or monochrome progressive scan CCD sensor**
Effective Pixels	**1616 x1216, 4.4μm square pixels**
Frame Rate	**12 fps at full resolution, higher fps with binning and ROI**
Signal/Noise	**>66dB**
Digital Output	**8 and 12-bit**
Read Noise	**12 e- rms**
Dimensions (W x H x D)	**2.00 x 2.50 x 1.63 inches (board level)**
	2.25 x 3.85 x 1.56 inches (enclosed)

Camera Controls

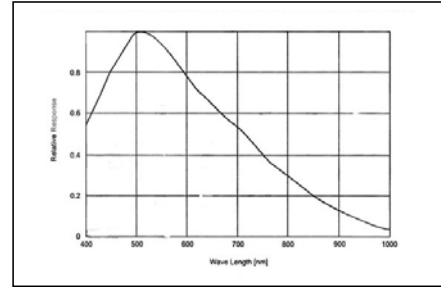|	
Mass	**300g**
Power Requirement	**USB bus power, or external 5VDC - 500mA**
Power Consumption	**~2.5Watts**
Operating Temperature	**0° C to +50° C**
Operating Humidity	**5%-95%, Non-condensing**
Integration Time	**1/1000 to 16 sec**
Shutter	**Global Shutter**
ROI	**User Selectable**
Auto Exposure	**Automatic / Manual**
White Balance	**Automatic / Manual**
Gain	**Programmable / 1 to 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, 4x4**

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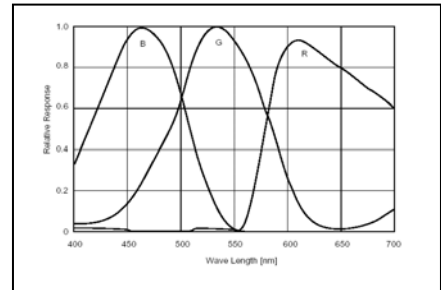- USB 2.0 Port
- Windows 2000 or XP

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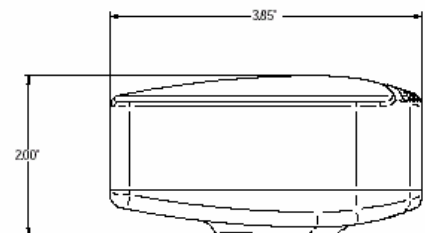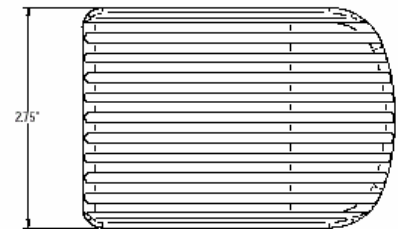- Windows 98 or ME

Product Includes:
- INFINITY*2-2* digital camera for USB 2.0
- CD-ROM with INFINITY user application software
- TWAIN driver
- Documentation
- USB 2.0 cable

Mono Response Curve

Color Response Curve

Ordering Information

Lumenera Corporation • 7 Capella Court, Ottawa, ON, Canada K2E 8A7 • (t) 1.613.736.4077 • (f) 1.613.736.4071