INFINITY2-1

1.4 Megapixel CCD USB 2.0 Camera

High Resolution CCD Color or Monochrome
Microscopy Camera for Image Analysis and Archiving

Outline

Performance Features

Lumenera's INFINITY*2-1* 1.4 megapixel CCD digital camera is a versatile solution for clinical, life science, materials science, and educational professionals working under low light conditions. With 1392x1040 resolution and on-board processing, the INFINITY*2-1* 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*2-1* 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 excellent sensitivity and low noise characteristic of the INFINITY*2-1* 1.4 megapixel CCD image sensor enables users to capture high quality images over a wide range of lighting conditions**

- ❑ **Full color sub-windowing allows for rapid focus and scanning of samples: 15 fps at full 1392x1040 resolution, 30 fps at smaller regions of interest**

- ❑ **Maximum frame rates exceed 200 fps with binning and ROI**

- ❑ **Select 8 & 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 for easy integration to 3rd party software**

- ❑ **Both Custom design services and a Software Developer's Kit (SDK) are available to help with unique design requirements and software integration**

- ❑ **INFINITY*2-1* cameras are software compatible with Windows™ 98 SE, Windows ME, Windows 2K and Windows XP operating systems**

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Camera Sensor

Image Sensor	½" Interline Sony ICX205 1.4 megapixel color or monochrome progressive scan CCD sensor 7.6mm x 6.2mm array
Effective Pixels	1392x1040, 4.65µm square pixels
Frame Rate	15 fps at 1392 x 1040, >200 fps with binning and ROI
Dynamic Range	>66dB
Digital Output	8 and 12-bit
Read Noise	12 e- rms
Readout Frequency	28.6 MHZ
Dimensions (W x H x D)	2.25 x 3.85 x 1.56 inches (enclosed)

Camera Controls

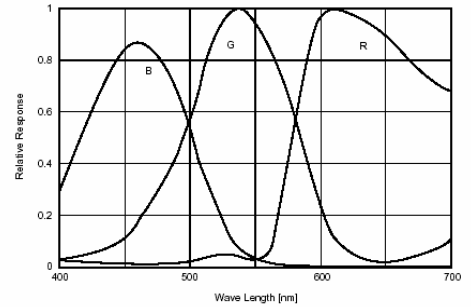|	
Mass	300g
Power Requirement	USB bus power, or external 5VDC - 500mA
Power Consumption	~2.5Watts
Operating Temperature	0° C to +50° C
Operating Humidity	5%-95%, Non-condensing
Integration Time	1/1000 to 16 sec.
Shutter	Global Shutter
ROI	User Selectable
Auto Exposure	Automatic / Manual
White Balance	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, 3x3, 4x4

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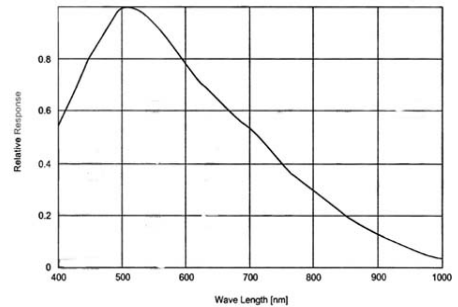- USB 2.0 Port
- Windows 2000 or XP

Minimum PC Specs:
- 600MHz Processor
- 256Mbytes of SDRAM
- 20GB hard drive free space
- USB 2.0 Port
- Windows 98 or ME with a USB 2.0
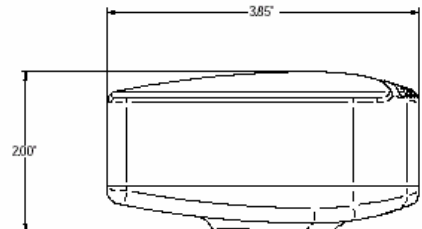- Add-in card and driver

Product Includes:
- INFINITY2-1 digital camera for USB 2.0
- CD-ROM with Infinity user application software
- TWAIN driver
- Documentation
- USB 2.0 cable

Color Response Curve

Mono Response Curve

Ordering Information

INFINITY*2-1* C – Color Camera

INFINITY*2-1* M – Monochrome Camera

Full customization available to meet your exact needs!

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