



1.4 Megapixel CCD USB 2.0 Camera

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

Outline

Lumenera's INFINITY2-1 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 INFINITY2-1 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.

INFINITY2-1 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.

Performance Features

- ❑ **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 characteristics of the INFINITY2-1 1.4 megapixel CCD image sensor enable 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**
- ❑ **INFINITY2-1 cameras are software compatible with Windows™ 98 SE, Windows ME, Windows 2K and Windows XP operating systems**

Specifications

INFINITY2-1

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:

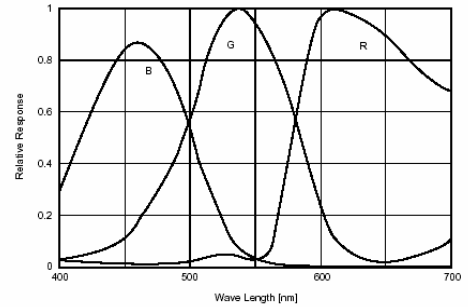
- Pentium 4, 1.3GHz or higher
- 512Mb RAM
- 60 GB hard drive free space or more
- USB 2.0 Port
- Windows 2000 or XP

Minimum PC Specs:

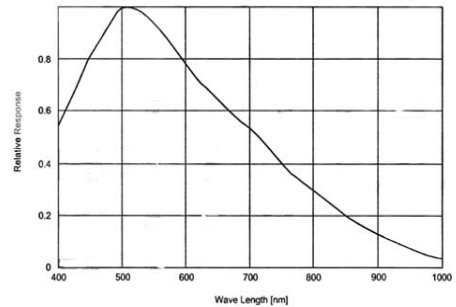
- 600MHz Processor
- 256Mbytes of SDRAM
- 20GB hard drive free space
- USB 2.0 Port
- Windows 98 or ME with a USB 2.0
- Add-in card and driver

Product Includes:

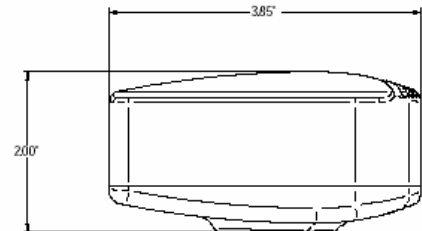
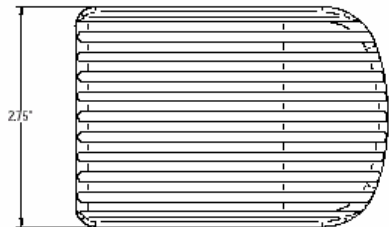
- INFINITY2-1 digital camera for USB 2.0
- CD-ROM with Infinity user application software
- TWAIN driver
- Documentation
- USB 2.0 cable



Color Response Curve



Mono Response Curve



Ordering Information

INFINITY2-1C – Color Camera

INFINITY2-1M – Monochrome Camera

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

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