INFINITY *1-2*

2.0 Megapixel CMOS USB 2.0 Camera

Scientific digital imaging for documentation in Clinical and Material Science Applications

INFINITY *1-2*

Within the INFINITY *1* family of CMOS cameras, the INFINITY *1-2* is an excellent entry level multi-megapixel microscopy camera. This camera is ideal for applications with bright, consistent lighting and tight budget constraints. The INFINITY *1-2* delivers outstanding image quality for a wide variety of scientific applications including clinical, life science, materials science and educational professionals.

Excellent Color Reproduction

Years of experience in the microscopy market have allowed Lumenera to develop specialized color algorithms ensuring excellent color reproduction in samples ranging from stained cells to wafer inspection.

Full Image Analysis Software Included

INFINITY CAPTURE, an intuitive image capture program, and INFINITY ANALYZE, a full image analysis package offering; camera control, measurement, annotations, tiling and post capture enhancement, are both included. Camera and software are combined to create a complete microscopy imaging solution for your application.

USB 2.0 Plug-and-Play Interface

Once the software has been installed, running one or more cameras on a single computer is as simple as plugging them into a high-speed USB 2.0 port.

Third-Party Software Integration

INFINITY cameras are integrated into a variety of third-party software packages through direct drivers or with TWAIN/DirectX support.

Mac Camera Software

A Mac camera driver, capture application and ImageJ plug-in are available for the INFINITY *1-2*.

Superior Technical Assistance Center (TAC)

As a customer you gain access to the TAC group and knowledge base, which provide full support for cameras, software and microscopy applications.

Features

- Progressive scan ½" 2.0 megapixel CMOS sensor
- Full color sub-windowing and subsampling for rapid focus and scanning of samples
- 8 or 10-bit pixel data modes
- Software compatible with Windows XP, Windows Vista, Windows 7 and Mac OSX, 32 and 64-bits
- Includes TWAIN and DirectX/ Direct Show support

Recommended Applications

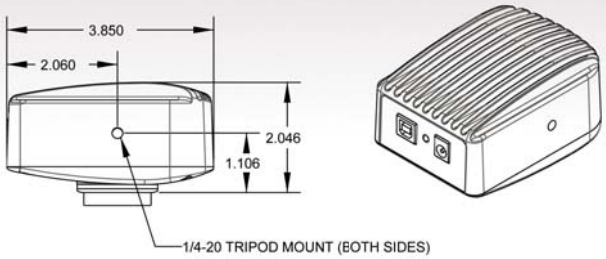
- Brightfield
- Live Cell Imaging
- Histology
- Pathology
- Cytology
- Defect Analysis
- Semiconductor Inspection
- Metrology

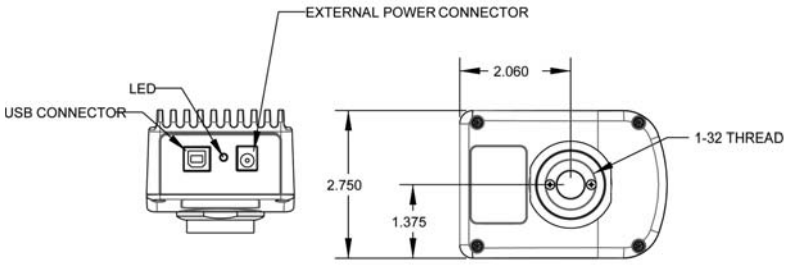
Warranty

- One (1) year parts and labor

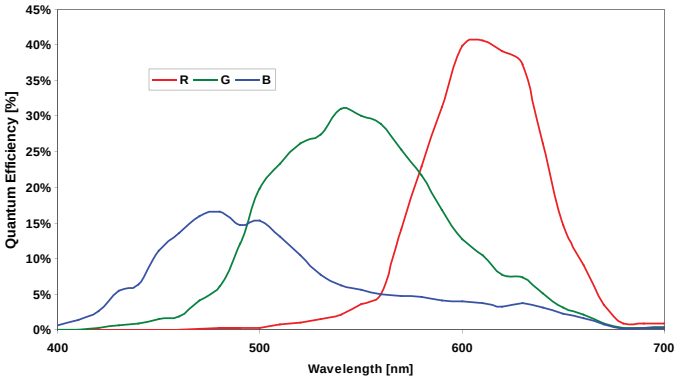
Microscope Coupler

- Requires 0.5x C-mount coupler





Quantum Efficiency



Sensor Specifications	
Image Sensor	SOI268, CMOS, color, progressive scan
Optical Format	1/2"
Active Area	6.72 mm x 5.04 mm
Pixel Size	4.2 µm x 4.2 µm
Resolution	1600 x 1200 pixels
Region of Interest Control	Any multiple of 8 x 8 pixels, 32 x 32 pixels minimum
Camera Specifications	
Frame Rate	15 fps
Bit Depth	8 or 10-bits
Binning / Subsampling Modes	2x subsampling mode
Exposure Control	Manual and automatic control
Exposure Range	64 µs - 499ms (video), 64 µs - 2s (snapshot)
Gain Control	Manual and automatic control
Gain Range	1-7.75 x
White Balance	Manual and automatic control
Camera Characteristics	
Sensitivity	2.2DN/(nJ/cm^2) [at 8-bit, 1x gains]
Dynamic Range	49dB
Pixel Well Depth	12,600 e-
Quantum Efficiency	40% (red - peak)
Read Noise	45 e-
Dark Current Noise	<8 e-/s
Mechanical Specifications	
Data Interface	USB 2.0
Lens Mount	Adjustable C-Mount standard
Dimensions	2.75 x 3.85 x 2.25 inches
Mass	300 grams
Operating Temperature	0° C - 50° C
Storage Temperature	-30° C - 70° C
Operating Humidity	5%-95%, non-condensing
Shock / Vibration	50 G shock, 5 G (2-200 Hz) vibration
Camera Software	
Operating Systems	Windows XP, Windows Vista, Windows 7, Mac OSX, 32 and 64-bits
Power and Emissions	
Power Consumption	~2.5 Watts
Power Requirement	USB bus power (optional 5VDC - 500mA)
Emissions Compliances	FCC Class BE, CE Certified
Hazardous Materials	RoHS, WEEE Compliant
Warranty	One (1) year
System Requirements	
Recommended PC Specs:	• Pentium 4, 1.3 GHz or higher • 512 MB RAM • 500 MB hard drive free space or more • USB 2.0 Port • Windows 7
Minimum PC Specs:	• 600 MHz Processor • 256 MB of SDRAM • 200 MB hard drive free space • USB 2.0 Port • Windows XP
Included In The Box	
INFINITY *1-2CB*	2 MP digital camera for USB 2.0
LuINFSW-DVD	DVD with INFINITY user application software (including INFINITY ANALYZE), TWAIN driver and documentation
Lu802	2 m USB 2.0 Cable
Ordering Information	
INFINITY *1-2*CB	2 MP CMOS Color Camera
Ordering Options	
INFINITY ANALYZE MODULE	INFINITY ANALYZE Advanced Features Module (Multi-Focus Composition and Spherical Aberration Correction Features)
LuSDKSW	Software Developer's Kit (Web Download)
LuSDKSW-DVD	Software Developer's Kit (DVD)
La20515	5VDC, 2.5A, 12.5W Power Supply (Optional)

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