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. Please refer to the Lumenera webpage at www.lumenera. com for up-to-date details.

Superior Technical Assistance Center (TAC)

As a Lumenera 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

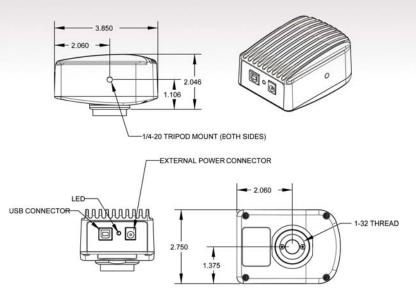
Warranty

• One (1) year parts and labor

Microscope Coupler

• Requires 0.5x C-mount coupler





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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				
Mechanical Specifications	<8 e-/s			
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Data Interface Lens Mount	USB 2.0			
	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	W			
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)			
4	GOD bas power (optional SVDO GOOITIVI)			
Emissions Compliances	FCC Class BE, CE Certified			
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Emissions Compliances Hazardous Materials Warranty	FCC Class BE, CE Certified			
Emissions Compliances Hazardous Materials	FCC Class BE, CE Certified RoHS, WEEE Compliant			
Emissions Compliances Hazardous Materials Warranty	FCC Class BE, CE Certified RoHS, WEEE Compliant One (1) year • Pentium 4, 1.3 GHz or higher			
Emissions Compliances Hazardous Materials Warranty	FCC Class BE, CE Certified RoHS, WEEE Compliant One (1) year			
Emissions Compliances Hazardous Materials Warranty System Requirements	FCC Class BE, CE Certified RoHS, WEEE Compliant One (1) year • Pentium 4, 1.3 GHz or higher • 512 MB RAM • 500 MB hard drive free space or more USB 2.0 Port			
Emissions Compliances Hazardous Materials Warranty System Requirements	FCC Class BE, CE Certified RoHS, WEEE Compliant One (1) year • Pentium 4, 1.3 GHz or higher • 512 MB RAM • 500 MB hard drive free space or more • USB 2.0 Port • Windows 7			
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Emissions Compliances Hazardous Materials Warranty System Requirements Recommended PC Specs: Minimum PC Specs: Included In The Box INFINITY 1-2CB	FCC Class BE, CE Certified RoHS, WEEE Compliant One (1) year • Pentium 4, 1.3 GHz or higher • 512 MB RAM • 500 MB hard drive free space or more • USB 2.0 Port • Windows 7 • 600 MHz Processor • 256 MB of SDRAM • 200 MB hard drive free space • USB 2.0 Port • Windows XP			
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Emissions Compliances Hazardous Materials Warranty System Requirements Recommended PC Specs: Minimum PC Specs: Included In The Box INFINITY 1-2CB LuINFSW-DVD	FCC Class BE, CE Certified RoHS, WEEE Compliant One (1) year • Pentium 4, 1.3 GHz or higher • 512 MB RAM • 500 MB hard drive free space or more • USB 2.0 Port • Windows 7 • 600 MHz Processor • 256 MB of SDRAM • 200 MB hard drive free space • USB 2.0 Port • Windows XP 2 MP digital camera for USB 2.0 DVD with INFINITY user application software (including INFINITY ANALYZE), TWAIN driver and documentation			
Emissions Compliances Hazardous Materials Warranty System Requirements Recommended PC Specs: Minimum PC Specs: Included In The Box INFINITY 1-2CB LuINFSW-DVD Lu802	FCC Class BE, CE Certified RoHS, WEEE Compliant One (1) year • Pentium 4, 1.3 GHz or higher • 512 MB RAM • 500 MB hard drive free space or more • USB 2.0 Port • Windows 7 • 600 MHz Processor • 256 MB of SDRAM • 200 MB hard drive free space • USB 2.0 Port • Windows XP 2 MP digital camera for USB 2.0 DVD with INFINITY user application software (including INFINITY ANALYZE), TWAIN driver and documentation			
Emissions Compliances Hazardous Materials Warranty System Requirements Recommended PC Specs: Minimum PC Specs: Included In The Box INFINITY 1-2CB LuINFSW-DVD Lu802 Ordering Information	FCC Class BE, CE Certified RoHS, WEEE Compliant One (1) year Pentium 4, 1.3 GHz or higher 512 MB RAM 500 MB hard drive free space or more USB 2.0 Port Windows 7 600 MHz Processor 256 MB of SDRAM 200 MB hard drive free space USB 2.0 Port Windows XP 2 MP digital camera for USB 2.0 DVD with INFINITY user application software (including INFINITY ANALYZE), TWAIN driver and documentation 2 m USB 2.0 Cable			
Emissions Compliances Hazardous Materials Warranty System Requirements Recommended PC Specs: Minimum PC Specs: Included In The Box INFINITY 1-2CB LuINFSW-DVD Lu802 Ordering Information INFINITY 1-2CB	FCC Class BE, CE Certified RoHS, WEEE Compliant One (1) year Pentium 4, 1.3 GHz or higher 512 MB RAM 500 MB hard drive free space or more USB 2.0 Port Windows 7 600 MHz Processor 256 MB of SDRAM 200 MB hard drive free space USB 2.0 Port Windows XP 2 MP digital camera for USB 2.0 DVD with INFINITY user application software (including INFINITY ANALYZE), TWAIN driver and documentation 2 m USB 2.0 Cable			
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Emissions Compliances Hazardous Materials Warranty System Requirements Recommended PC Specs: Minimum PC Specs: Included In The Box INFINITY 1-2CB LuINFSW-DVD Lu802 Ordering Information INFINITY 1-2CB Ordering Options INFINITY ANALYZE MODULE	FCC Class BE, CE Certified RoHS, WEEE Compliant One (1) year Pentium 4, 1.3 GHz or higher 512 MB RAM 500 MB hard drive free space or more USB 2.0 Port Windows 7 600 MHz Processor 256 MB of SDRAM 200 MB hard drive free space USB 2.0 Port Windows XP 2 MP digital camera for USB 2.0 DVD with INFINITY user application software (including INFINITY ANALYZE), TWAIN driver and documentation 2 m USB 2.0 Cable INFINITY ANALYZE Advanced Features Module (Multi-Focus Composition and Spherical Aberration Correction Features)			
Emissions Compliances Hazardous Materials Warranty System Requirements Recommended PC Specs: Minimum PC Specs: Included In The Box INFINITY 1-2CB LuINFSW-DVD Lu802 Ordering Information INFINITY 1-2CB Ordering Options INFINITY ANALYZE MODULE LuSDKSW	FCC Class BE, CE Certified RoHS, WEEE Compliant One (1) year Pentium 4, 1.3 GHz or higher 512 MB RAM 500 MB hard drive free space or more USB 2.0 Port Windows 7 600 MHz Processor 256 MB of SDRAM 200 MB hard drive free space USB 2.0 Port Windows XP 2 MP digital camera for USB 2.0 DVD with INFINITY user application software (including INFINITY ANALYZE), TWAIN driver and documentation 2 m USB 2.0 Cable INFINITY ANALYZE Advanced Features Module (Multi-Focus Composition and Spherical Aberration Correction Features) Software Developer's Kit (Web Download)			

