

INFINITY 1-1M

1.3 Megapixel CMOS USB 2.0 Camera

Low Cost, High-Speed, CMOS Monochrome
Microscopy Camera



INFINITY 1-1M

Lumenera's INFINITY 1-1M digital camera is a cost-effective, versatile solution for clinical, life science, materials science and educational professionals. With 1280x1024 resolution and 30 fps frame rate, the INFINITY 1-1M delivers outstanding image quality and fast preview for a wide variety of applications. The low noise characteristic of the INFINITY 1-1 progressive scan 1.3 megapixel image sensor results in crisp quality for the most demanding microscopy applications including life science and material science applications.

Full Image Analysis Software Included

INFINITY CAPTURE, an intuitive image capture program, and INFINITY ANALYZE, a full image analysis software 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. The camera is also compatible with USB 3.0.

Third-Party Software Integration

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

Mac Camera Software

A Mac camera driver, capture application and ImageJ plug-in are available for the INFINITY 1-1M. Refer to the Lumenera website at www.lumenera.com for up-to-date details.

Superior Technical Assistance Center (TAC)

All Lumenera cameras are supported by an experienced team of technical support and imaging experts widely acclaimed in the industry. As a Lumenera customer you gain access to the TAC group and knowledge base, providing full support for cameras, software and microscopy applications.

Features

- 30 fps at full 1280x1024 resolution and 120 fps at 640x480 resolution
- Select 8 & 10-bit pixel data modes
- Compact design equipped with a C-Mount, facilitating installation on all microscope configurations including upright, inverted and stereo
- Software compatible with Windows 8, 7, XP, Vista, Mac OS X 10.7, 32 and 64-bit operating systems
- Includes TWAIN and DirectX/Direct Show support

Recommended Applications

- Life Science
- Material Sciences
- Inspection
- Geology

Warranty

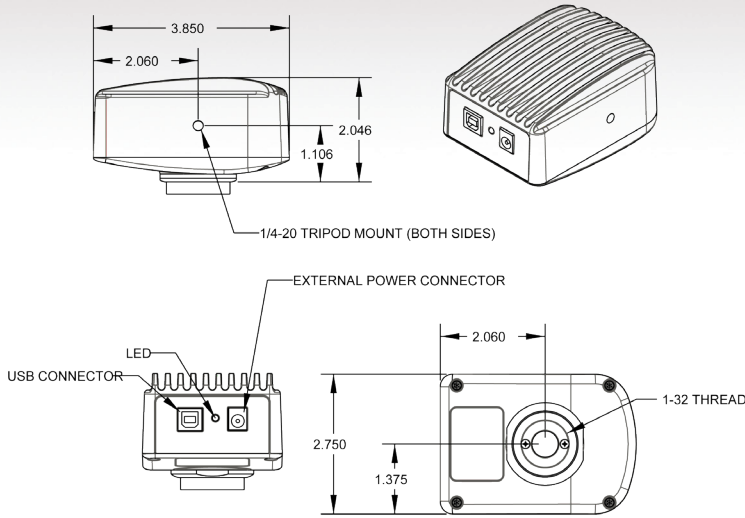
- Four (4) year warranty

Microscope Coupler

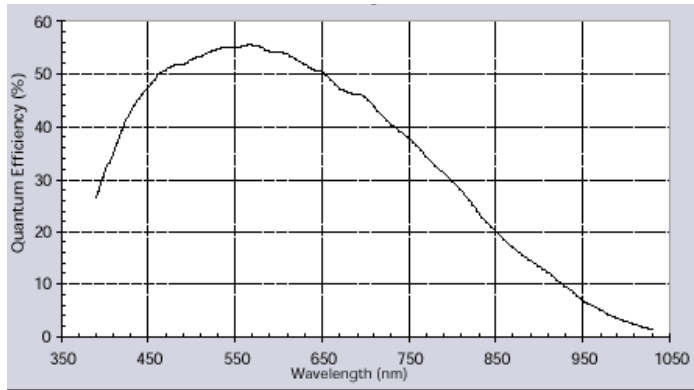
- Recommend 0.5x C-Mount coupler



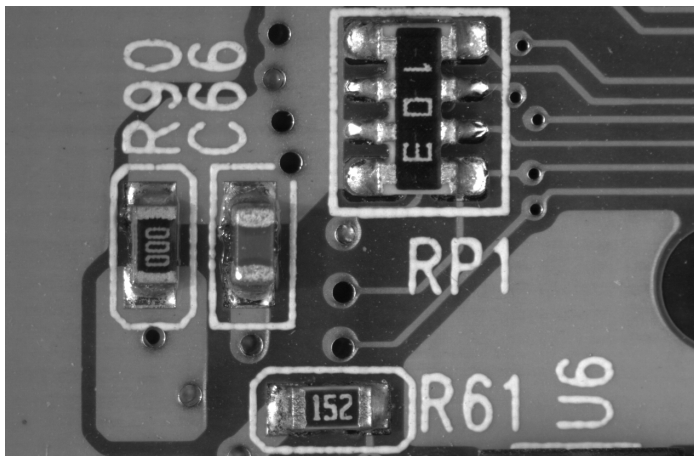
Mechanical Drawings



Monochrome Quantum Efficiency Curve



INFINITY 1-1M Sample Image - PCB Inspection



Sensor Specifications	
Image Sensor	1/2" CMOS Aptina MT9M001 (Mono)
Optical Format	1/2"
Active Area	Diagonal 10.972 mm
Pixel Size	5.2 x 5.2 μ m
Resolution	1280 x 1024 pixels
Region of Interest Control	User selectable
Camera Specifications	
Frame Rate	30 fps (1280 x 1024), 120 fps (640 x 480)
Bit Depth	8 or 10-bit
Exposure Control	Manual and automatic control
Gain	Manual control
Gain Range	1.0 to 15x
Camera Characteristics	
Dynamic Range	>60dB
Mechanical Specifications	
Data Interface	USB 2.0
Lens Mount	C-Mount
Dimensions	3.85 x 2.00 x 2.75 inches
Mass	300 g
Operating Temperature	0 to 50 $^{\circ}$ C
Camera Software	
Operating Systems	Windows XP, Vista, 7, 8 (32 and 64-bit), Mac OSX 10.7
Power and Emissions	
Power Consumption	~2.5 W
Power Requirement	USB bus power, or external 6VDC - 500mA
Emissions Compliances	FCC Class B, CE Certified
Hazardous Materials	RoHS, WEEE Compliant
Warranty	Four (4) year
Included In The Box	
INFINITY 1-1M	1.3 MP digital camera and 3m USB 2.0 cable
LuINFSW-DVD	DVD with INFINITY ANALYZE and CAPTURE software, TWAIN driver and documentation
Ordering Information	
INFINITY 1-1M	1.3 MP CMOS Monochrome Camera
LuSDKSW	Software Developer's Kit (Web Download)
La20606 Power supply	6VDC, Power Supply (Optional)
LuINFSW-DVD	DVD with INFINITY user application software, TWAIN driver and documentation

