

# INFINITY 1-1M

1.3 Megapixel CMOS USB 2.0 Camera

Low Cost, High-Speed, CMOS Monochrome Microscopy Camera.



## INFINITY 1-1M

INFINITY 1-1M digital camera is designed to be a cost-effective, versatile solution for clinical, life science, materials science and educational professionals. With 1280x1024 resolution and on-board processing, the INFINITY 1-1M delivers outstanding image quality for a wide variety of scientific 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.

### 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 1-1M.

### Superior Technical Assistance Center (TAC)

All cameras are supported by an experienced team of technical support and imaging experts widely acclaimed in the industry. As a 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 XP, Vista, 7, 8, Mac OSX 10.7, 32 and 64-bit operating systems
- Includes TWAIN and DirectX/ Direct Show support

## Recommended Applications

- Life Science
- Material Sciences
- Inspection
- Geology

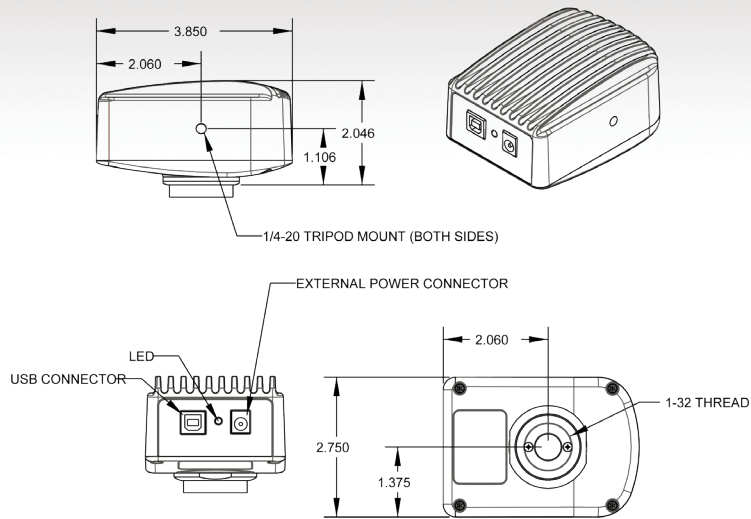
## Warranty

- Two (2) year parts and labor

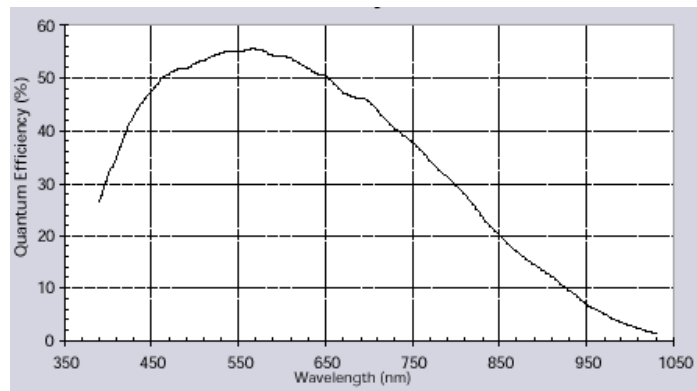
## Microscope Coupler

- Recommend 0.5x C-Mount coupler

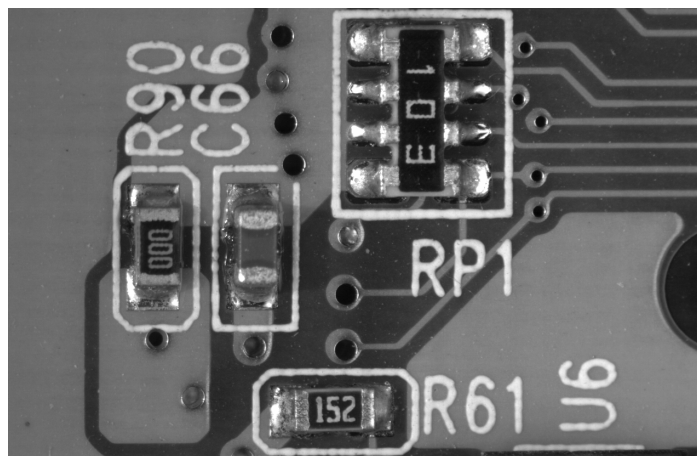
## Mechanical Drawings



## 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 $\mu$ 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	Two (2) years

## Included In The Box

INFINITY 1-1M	1.3 MP digital camera and USB 2.0 cable
LulNFSW-DVD	DVD with INFINITY ANALYZE and CAPTURE software, TWAIN driver and documentation

## Ordering Information

INFINITY 1-1M	1.3 MP CMOS Monochrome Camera
LulAP-1	INFINITY Advanced Features Pack 1: Includes USB Key for extra INFINITY ANALYZE license, additional 3 year warranty, 1 advance product replacement.
LuSDKSW	Software Developer's Kit (Web Download)
LuSDKSW-DVD	Software Developer's Kit (DVD)
La20606 Power supply	6VDC, Power Supply (Optional)
LulNFSW-DVD	DVD with INFINITY user application software, TWAIN driver and documentation