INFINITY*1-1*M

1.3 Megapixel CMOS USB 2.0 Camera

Low Cost, High-Speed, CMOS Monochrome Microscopy Camera

INFINITY *1-1*M

Teledyne Lumenera's INFINITY *1-1*M 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 *1-1*M 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. This camera is compatible with the USB 3.0 interface, supporting the existing USB 2.0 frame rates.

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 *1-1*M. Refer to the Teledyne Lumenera website, www.teledynelumenera.com for up-to-date details.

Superior Technical Assistance Center (TAC)

All Teledyne Lumenera cameras are supported by an experienced team of technical support and imaging experts widely acclaimed in the industry. As a Teledyne 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 10, 8, 7, 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

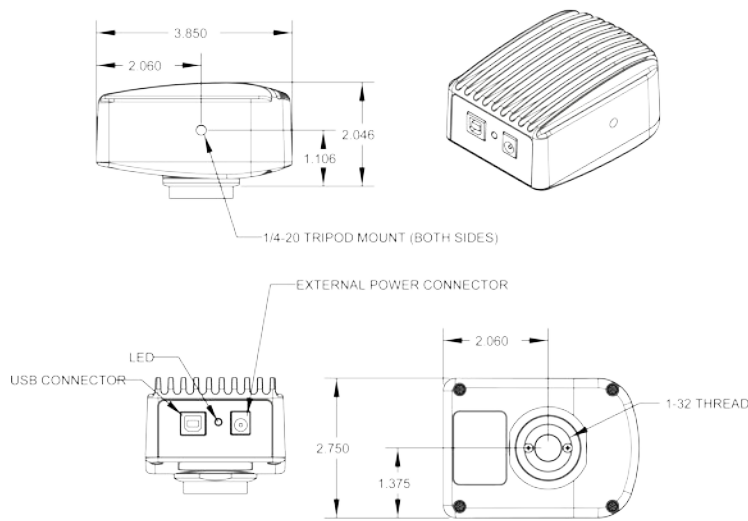### Warranty

- Four (4) year warranty

Microscope Coupler
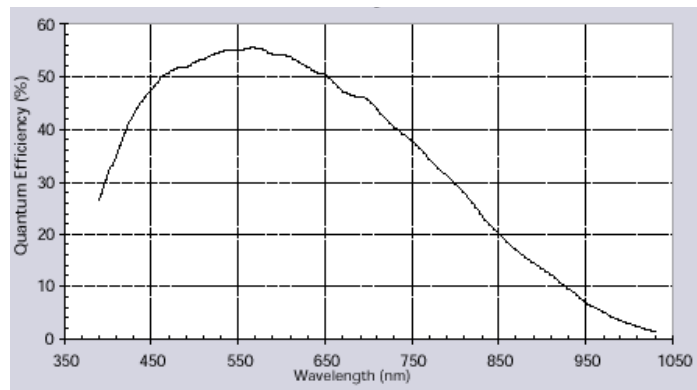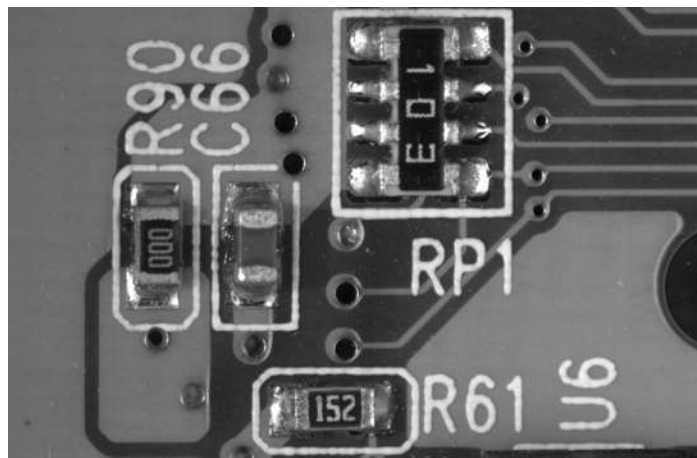
- Recommend 0.5x C-Mount coupler

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Mechanical Drawings

Monochrome Quantum Efficiency Curve

INFINITY *1-1*M Sample Image - PCB Inspection

Sensor Specifications	
Image Sensor	1/2" CMOS Aptina MT9M001 (Mono)
Optical Format	1/2"
Imager Size	Diagonal 8.46 mm
Pixel Size	5.2 x 5.2 µm
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	>54dB
Mechanical Specifications	
Data Interface	USB 2.0
Lens Mount	Adjustable C-Mount standard
Dimensions	97.8 x 69.8 x 50.8 mm 3.85 x 2.75 x 2.00 inch
Mass	300 g
Operating Temperature	0 to 50 ºC
Storage Temperature	-30 to 70 ºC
Operating Humidity	5 to 95%, non-condensing
Shock / Vibration	50 G shock, 5 G (2-200 Hz) vibration
Onboard Memory	Camera has onboard non-volatile memory storage
Camera Software	
Operating Systems	Windows 10, 8, 7, Vista, Mac OS X 10.7, 32 and 64-bit
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*1-1*M	1.3 MP digital camera and 3m USB 2.0 cable

Ordering Information	
INFINITY*1-1*M	1.3 MP CMOS Monochrome Camera
LuSDKSW	Software Developer's Kit (Web Download)
La20606 Power supply	6VDC, Power Supply (Optional)