INFINITY*2-2*

2.0 Megapixel CCD USB 2.0 Camera

High Resolution CCD Color or Monochrome
Microscopy Camera for Qualitative Image Archiving

INFINITY*2-2*

The INFINITY*2-2* is one of Lumenera's most popular scientific camera, offering the perfect balance of resolution, color reproduction, sensitivity and high-speed preview. The multi-purpose INFINITY*2-2* provides laboratories with the ability to perform a variety of applications, replacing the need for multiple camera systems. Whether you are performing brightfield or fluorescence microscopy, this is the perfect solution for your technique.

Superior Sensitivity and Color Reproduction

Years of experience in the microscopy market have allowed Lumenera to develop specialized algorithms ensuring superior color reproduction. Additionally, INFINITY software allows the adjustment of all live preview color facets, enabling users to apply their own personal preferences to each image. For lower light applications the Sony CCD sensor has an extremely high dynamic range, resulting in excellent camera sensitivity.

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 combined to create a complete microscopy imaging solution for your application.

USB 2.0 Plug-and-Play Interface

Sharing and installation of one or more cameras on a single computer is quick and simple through a high-speed USB 2.0 interface. 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/DirectX support.

Mac Camera Software

A Mac camera driver and ImageJ plug-in are available for the INFINITY*2-2*. Please refer to the Lumenera webpage 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

- Low noise progressive scan 1/1.8" 2.0 megapixel Sony ICX274 CCD sensor
- Full color sub-windowing allows for rapid focus and scanning of samples; up to 30 fps at 640x480 resolution
- 8 or 12-bit pixel data modes
- 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

- Brightfield
- Darkfield
- Live Cell Imaging
- Histology
- Pathology
- Cytology
- Defect Analysis
- Semiconductor Inspection
- Metrology
- Gel Documentation
- Moderate Light Fluorescence
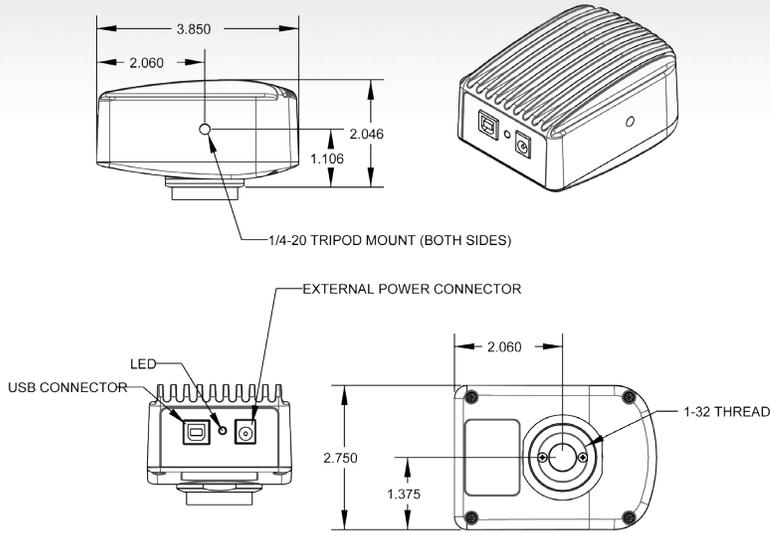- Quantitative Analysis
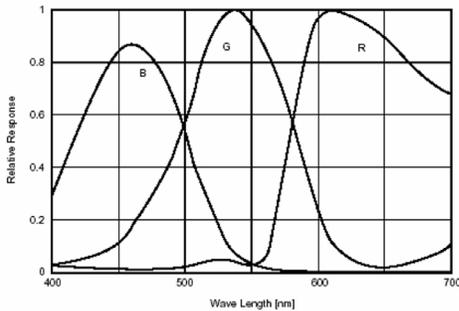
Warranty

- Four (4) year warranty

Microscope Coupler
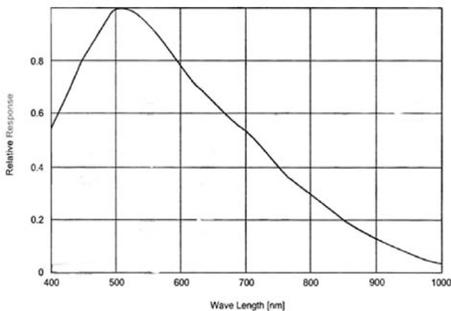
- Requires 0.5x c-mount coupler

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1/4-20 TRIPOD MOUNT (BOTH SIDES)

EXTERNAL POWER CONNECTOR

LED

USB CONNECTOR

1-32 THREAD

Color Quantum Efficiency Curves

Monochrome Quantum Efficiency Curve

Sensor Specifications	
Image Sensor	Sony ICX274 2.0 Megapixal CCD, color or mono-chrome, progressive scan
Optical Format	1/1.8"
Imager Size	Diagonal 8.93mm
Pixel Size	4.4 x 4.4 µm
Resolution	1616 x 1216 pixels
Region of Interest Control	Any multiple of 8 x 8 pixels

Camera Specifications	
Frame Rate	12 fps (1616 x 1216)
Bit Depth	8 or 12 bit
Binning	2 x 2, 4 x 4
Exposure Control	Manual and automatic control
Exposure Range	118 µs to 1.17 s (video), 50 µs - 10 s (snapshot)
Gain Control	Manual and automatic control
Gain Range	1 to 10 x
White Balance	Manual and automatic control

Camera Characteristics	
Dynamic Range	57 dB
Pixel Well Depth	7,373 e-
Quantum Efficiency	59% (@ 575nm, mono)
Read Noise	12 e-
Dark Current Noise	< 1 e-/s at 22 °C

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	300g
Operating Temperature	0 to 50 °C
Storage temperature	-30 to 70 °C
Operating Humidity	5 to 95 %, non-condensing
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 (optional 5 V DC, 500 mA)
Emissions Compliances	FCC Class BE, CE Certified
Hazardous Materials	RoHS, WEEE Compliant
Warranty	Four (4) year

System Requirements	
Recommended PC Specs:	• Pentium 4, 1.3 GHz or higher • 512 MB RAM or more • 60 MB hard drive free space or more • USB 2.0 or USB 3.0 Port • Windows 10, 8, 7, Vista, Mac OS X 10.7, 32 and 64-bit

Included In The Box	
INFINITY2-2	2 MP digital camera + 3m USB 2.0 Cable
LuINFSW-DVD	DVD with INIFINITY user application software (including INFINITY ANALYZE), Twain driver and documention

Ordering Information	
INFINITY2-2C	2 MP CCD Color Camera
INFINITY2-2M	2 MP CCD Monochrome Camera

Ordering Options	
LuAFM	INFINITY ANALYZE Advanced Features Module (Multi-Focus Composition and Spherical Aberration Correction Features)
LuSDKSW	Software Developer's Kit (Web Download)
La050300	5 V DC, 2.5 A, 12.5 W Power Supply (Optional)

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