INFINITY*2-3*

3.3 Megapixel CCD USB 2.0 Camera

High Resolution CCD Color
Microscopy Camera for Qualitative Image Archiving

INFINITY*2-3*

For applications demanding a higher resolution, the INFINITY*2-3* allows users to view fine detail in their samples without the pixilation commonly found in lower resolution cameras. A 2080 x 1536 resolution positions this camera as an excellent solution for previewing images on high definition monitors or overhead projectors, as well as the production of larger printed images for posters and charts.

Superior Sensitivity and Color Reproduction

Years of experience in the microscopy market have allowed Lumenera to develop specialized algorithms ensuring excellent 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*2-3*. 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" 3.3 megapixel Sony ICX262 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
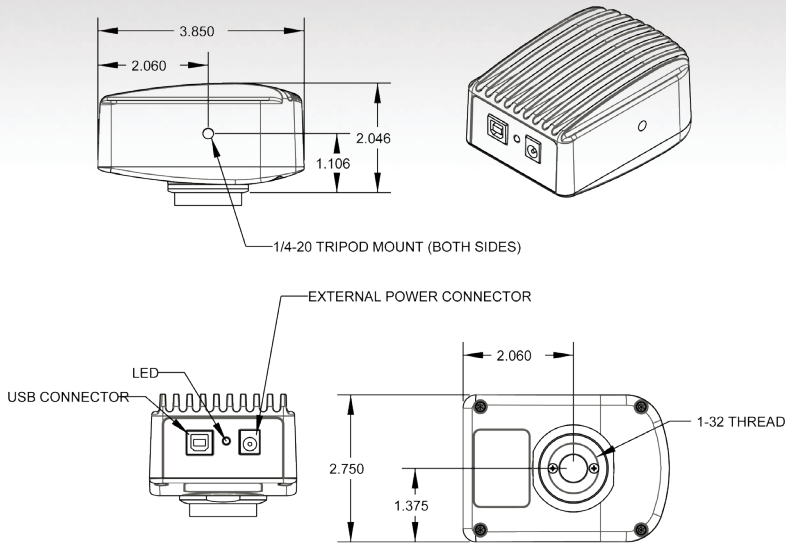- Moderate Light Fluorescence
- Quantitative Analysis
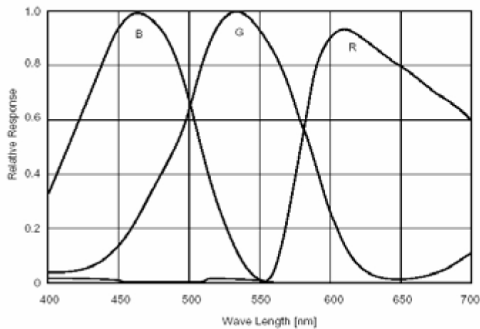
Warranty

- Four (4) year warranty

Microscope Coupler

- Requires 0.5x c-mount coupler

Lumenera corporation

1/4-20 TRIPOD MOUNT (BOTH SIDES)

EXTERNAL POWER CONNECTOR

LED

USB CONNECTOR

1-32 THREAD

Color Quantum Efficiency Curves

Sensor Specifications	
Image Sensor	Sony ICX262, 3.3 megapixel, CCD, color, progressive scan
Optical Format	1/1.8"
Imager Size	Diagonal 8.93mm
Pixel Size	3.45 x 3.45 µm
Resolution	2080 x1536 pixels
Region of Interest Control	Any multiple of 16 x 16 pixels

Camera Specifications	
Frame Rate	5 fps (2080 x 1536)
Bit Depth	8 or 12-bit
Binning	2 x 2, 3 x 3, 4 x 4
Exposure Control	Manual and automatic control
Exposure Range	118 µs to 2.97 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	58 db
Pixel Well Depth	10,630 e-
Quantum Efficiency	43% (@ 535 nm, color)
Read Noise	13 e-
Dark Current Noise	<1 e-/s at 22 ℃

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 ℃
Storage temperature	-30 to 70 ℃
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 B, 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	
INFINITY*2-3C*	3.3 MP digital camera + 3m USB 2.0 Cable
LuINFSW-DVD	DVD with INFINITY user application software (including INFINITY ANALYZE), Twain driver and documentation

Ordering Information	
INFINITY*2-3C*	3.3 MP CCD Color 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)