INFINITY 2-2

2.0 Megapixel CCD USB 2.0 Camera

High Resolution CCD Color or Monochrome

Microscopy Camera for Qualitative Image Archiving



INFINITY2-2

The INFINITY2-2 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 INFINITY2-2 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.

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 8, 7, XP, Vista, Mac OS X 10.7, 32 and 64-bit operating systems
- Includes TWAIN and DirectX/ Direct Show support

Recommended Applications

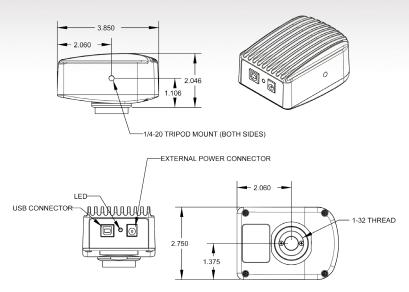
- Brightfield
- Darkfield
- Live Cell Imaging
- Histology
- Pathology
- Cytology
- Defect Analysis
- Semiconductor Inspection
- Metrology
- Gel Documentation
- Moderate Light Fluorescence
- Quantitative Analysis

Warranty

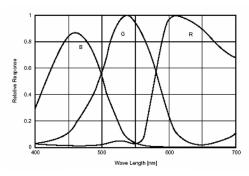
• Four (4) year warranty

Microscope Coupler

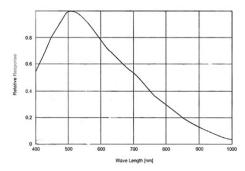
Requires 0.5x c-mount coupler



Color Quantum Efficiency Curves



Monochrome Quantum Efficiency Curve



Sensor Specifications	
	Sony ICX274 2.0 Megapixal CCD, color or mono-
Image Sensor	chrome, progressive scan
Optical Format	1/1.8"
Active Area	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- rms
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 50.8 x 69.9 mm 3.85 x 2.00 x 2.75 inch
Mass	300g
Operating Temperature	0 to 50 °C
Storage temperature	-30 to 70 °C
Operating Humidity	5 to 95 %, non-condensing
Camera Software	
Camera Software	
Operating Systems	Windows 8, 7, XP, Vista, Mac OS X 10.7, 32 and 64-bit
Operating Systems	
Operating Systems Power and Emissions	64-bit
Operating Systems Power and Emissions Power Consumption	~2.5 W
Operating Systems Power and Emissions Power Consumption Power Requirement	~2.5 W USB bus power (optional 5 V DC, 500 mA)
Operating Systems Power and Emissions Power Consumption Power Requirement Emissions Compliances	~2.5 W USB bus power (optional 5 V DC, 500 mA) FCC Class BE, CE Certified
Operating Systems Power and Emissions Power Consumption Power Requirement Emissions Compliances Hazardous Materials	~2.5 W USB bus power (optional 5 V DC, 500 mA) FCC Class BE, CE Certified RoHS, WEEE Compliant
Operating Systems Power and Emissions Power Consumption Power Requirement Emissions Compliances Hazardous Materials Warranty	~2.5 W USB bus power (optional 5 V DC, 500 mA) FCC Class BE, CE Certified RoHS, WEEE Compliant
Operating Systems Power and Emissions Power Consumption Power Requirement Emissions Compliances Hazardous Materials Warranty System Requirements	-2.5 W USB bus power (optional 5 V DC, 500 mA) FCC Class BE, CE Certified RoHS, WEEE Compliant Four (4) year Pentium 4, 1.3 GHz or higher 5 12 MB RAM or more 6 0 MB hard drive free space or more USB 2.0 or USB 3.0 Port
Operating Systems Power and Emissions Power Consumption Power Requirement Emissions Compliances Hazardous Materials Warranty System Requirements Recommended PC Specs:	-2.5 W USB bus power (optional 5 V DC, 500 mA) FCC Class BE, CE Certified RoHS, WEEE Compliant Four (4) year Pentium 4, 1.3 GHz or higher 5 12 MB RAM or more 6 0 MB hard drive free space or more USB 2.0 or USB 3.0 Port
Operating Systems Power and Emissions Power Consumption Power Requirement Emissions Compliances Hazardous Materials Warranty System Requirements Recommended PC Specs: Included In The Box	-2.5 W USB bus power (optional 5 V DC, 500 mA) FCC Class BE, CE Certified RoHS, WEEE Compliant Four (4) year 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 8, 7, XP, Mac OS X 10.7
Operating Systems Power and Emissions Power Consumption Power Requirement Emissions Compliances Hazardous Materials Warranty System Requirements Recommended PC Specs: Included In The Box INFINITY 2-2	-2.5 W USB bus power (optional 5 V DC, 500 mA) FCC Class BE, CE Certified RoHS, WEEE Compliant Four (4) year 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 8, 7, XP, Mac OS X 10.7 2 MP digital camera + 3m USB 2.0 Cable DVD with INIFINITY user application software (including INFINITY ANALYZE), Twain driver and
Operating Systems Power and Emissions Power Consumption Power Requirement Emissions Compliances Hazardous Materials Warranty System Requirements Recommended PC Specs: Included In The Box INFINITY2-2 LuINFSW-DVD	-2.5 W USB bus power (optional 5 V DC, 500 mA) FCC Class BE, CE Certified RoHS, WEEE Compliant Four (4) year 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 8, 7, XP, Mac OS X 10.7 2 MP digital camera + 3m USB 2.0 Cable DVD with INIFINITY user application software (including INFINITY ANALYZE), Twain driver and
Operating Systems Power and Emissions Power Consumption Power Requirement Emissions Compliances Hazardous Materials Warranty System Requirements Recommended PC Specs: Included In The Box INFINITY2-2 LuINFSW-DVD Ordering Information	-2.5 W USB bus power (optional 5 V DC, 500 mA) FCC Class BE, CE Certified RoHS, WEEE Compliant Four (4) year 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 8, 7, XP, Mac OS X 10.7 2 MP digital camera + 3m USB 2.0 Cable DVD with INIFINITY user application software (including INFINITY ANALYZE), Twain driver and documention
Operating Systems Power and Emissions Power Consumption Power Requirement Emissions Compliances Hazardous Materials Warranty System Requirements Recommended PC Specs: Included In The Box INFINITY2-2 LuINFSW-DVD Ordering Information INFINITY2-2C	-2.5 W USB bus power (optional 5 V DC, 500 mA) FCC Class BE, CE Certified RoHS, WEEE Compliant Four (4) year 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 8, 7, XP, Mac OS X 10.7 2 MP digital camera + 3m USB 2.0 Cable DVD with INIFINITY user application software (including INFINITY ANALYZE), Twain driver and documention 2 MP CCD Color Camera
Operating Systems Power and Emissions Power Consumption Power Requirement Emissions Compliances Hazardous Materials Warranty System Requirements Recommended PC Specs: Included In The Box INFINITY2-2 LuINFSW-DVD Ordering Information INFINITY2-2C INFINITY2-2M	-2.5 W USB bus power (optional 5 V DC, 500 mA) FCC Class BE, CE Certified RoHS, WEEE Compliant Four (4) year 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 8, 7, XP, Mac OS X 10.7 2 MP digital camera + 3m USB 2.0 Cable DVD with INIFINITY user application software (including INFINITY ANALYZE), Twain driver and documention 2 MP CCD Color Camera
Operating Systems Power and Emissions Power Consumption Power Requirement Emissions Compliances Hazardous Materials Warranty System Requirements Recommended PC Specs: Included In The Box INFINITY2-2 LuINFSW-DVD Ordering Information INFINITY2-2C INFINITY2-2M Ordering Options	

