



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Solicitation

NUMBER
 DPS1338

PAGE
 1

ADDRESS CORRESPONDENCE TO ATTENTION OF
 TARA LYLE
 304-558-2544

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RFQ COPY
 TYPE NAME/ADDRESS HERE

B & B MICROSCOPES, LTD
 490 Lowries Run Road
 Pittsburgh, PA 15237

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T
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WEST VIRGINIA STATE POLICE
 4124 KANAWHA TURNPIKE
 SOUTH CHARLESTON, WV
 25309 304-746-2141

DATE PRINTED
 05/16/2013

BID OPENING DATE: 06/11/2013

BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT	
0001	4	EA		655-39	4073.00	\$16,292.00	
MICROSCOPE CAMERA WITH SOFTWARE THE WEST VIRGINIA PURCHASING DIVISION FOR THE AGENCY, WV STATE POLICE, IS SOLICITING BIDS FOR FOUR (4) MICROSCOPE CAMERAS WITH SOFTWARE FOR THE WEST VIRGINIA STATE POLICE, PER THE ATTACHED SPECIFICATIONS. ATTACHMENTS INCLUDE: 1. INSTRUCTIONS TO VENDORS SUBMITTING BIDS 2. GENERAL TERMS AND CONDITIONS 3. DPS1338 SPECIFICATIONS 4. WV96A AGREEMENT FORM 5. CERTIFICATION AND SIGNATURE PAGE 6. PURCHASING AFFIDAVIT 7. RESIDENT VENDOR PREFERENCE FORM							
***** THIS IS THE END OF RFQ						DPS1338 ***** TOTAL:	\$16,292.00
06/10/13 09:21:59 AM West Virginia Purchasing Division							

SIGNATURE:

TITLE: Office Manager

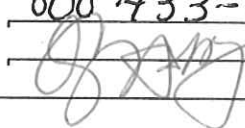
FEIN:

TELEPHONE: 412 635 7575

DATE: 6/7/13

ADDRESS CHANGES TO BE NOTED ABOVE

DPS 1338-Pricing Page

DPS 1338		BID OPENING: 6/11/13 1:30 pm		
Item #	Description	Quantity	Unit Price	Extended Price
3.1.1	Microscope Cameras, Olympus DP26 Or Equal with software	4	\$ 4073. ⁰⁰	\$ 16292. ⁰⁰
Failure to use this form may result in disqualification.			Total Cost:	\$ 16292. ⁰⁰
Bidder / Vendor Information:				
Name: <u>B & B Microscopes, Ltd</u>				
Address: <u>490 Lowries Run Rd</u>				
<u>Pittsburgh PA 15237</u>				
Phone and Fax#: <u>800 433-1749 877-768 1984</u>				
Signature: 				
Contact Coordinator Information:				
Name: <u>Dennis Madden or Ann Hunt</u>				
Address: <u>490 Lowries Run Rd</u>				
<u>Pitt PA 15237</u>				
Phone #: <u>800-433 1749</u>				
Email Address: <u>Dennis.madden@BBMicro.com</u>				
<u>Ann.HUNT@BBMicro.com</u>				

AGREEMENT ADDENDUM FOR SOFTWARE

In the event of conflict between this addendum and the agreement, this addendum shall control:

1. **DISPUTES** - Any references in the agreement to arbitration or to the jurisdiction of any court are hereby deleted. Disputes arising out of the agreement shall be presented to the West Virginia Court of Claims.
2. **HOLD HARMLESS** - Any provision requiring the Agency to indemnify or hold harmless any party is hereby deleted in its entirety.
3. **GOVERNING LAW** - The agreement shall be governed by the laws of the State of West Virginia. This provision replaces any references to any other State's governing law.
4. **TAXES** - Provisions in the agreement requiring the Agency to pay taxes are deleted. As a State entity, the Agency is exempt from Federal, State, and local taxes and will not pay taxes for any Vendor including individuals, nor will the Agency file any tax returns or reports on behalf of Vendor or any other party.
5. **PAYMENT** - Any references to prepayment are deleted. Fees for software licenses, subscriptions, or maintenance are payable annually in advance. Payment for services will be in arrears.
6. **INTEREST** - Any provision for interest or charges on late payments is deleted. The Agency has no statutory authority to pay interest or late fees.
7. **NO WAIVER** - Any language in the agreement requiring the Agency to waive any rights, claims or defenses is hereby deleted.
8. **FISCAL YEAR FUNDING** - Service performed under the agreement may be continued in succeeding fiscal years for the term of the agreement, contingent upon funds being appropriated by the Legislature or otherwise being available for this service. In the event funds are not appropriated or otherwise available for this service, the agreement shall terminate without penalty on June 30. After that date, the agreement becomes of no effect and is null and void. However, the Agency agrees to use its best efforts to have the amounts contemplated under the agreement included in its budget. Non-appropriation or non-funding shall not be considered an event of default.
9. **STATUTE OF LIMITATION** - Any clauses limiting the time in which the Agency may bring suit against the Vendor, lessor, individual, or any other party are deleted.
10. **SIMILAR SERVICES** - Any provisions limiting the Agency's right to obtain similar services or equipment in the event of default or non-funding during the term of the agreement are hereby deleted.
11. **FEES OR COSTS** - The Agency recognizes an obligation to pay attorney's fees or costs only when assessed by a court of competent jurisdiction. Any other provision is invalid and considered null and void.
12. **ASSIGNMENT** - Notwithstanding any clause to the contrary, the Agency reserves the right to assign the agreement to another State of West Virginia agency, board or commission upon thirty (30) days written notice to the Vendor and Vendor shall obtain the written consent of Agency prior to assigning the agreement.
13. **LIMITATION OF LIABILITY** - The Agency, as a State entity, cannot agree to assume the potential liability of a Vendor. Accordingly, any provision in the agreement limiting the Vendor's liability for direct damages is hereby deleted. Vendor's liability under the agreement shall not exceed three times the total value of the agreement. Limitations on special, incidental or consequential damages are acceptable. In addition, any limitation is null and void to the extent that it precludes any action for injury to persons or for damages to personal property.
14. **RIGHT TO TERMINATE** - Agency shall have the right to terminate the agreement upon thirty (30) days written notice to Vendor. Agency agrees to pay Vendor for services rendered or goods received prior to the effective date of termination. In such event, Agency will not be entitled to a refund of any software license, subscription or maintenance fees paid.
15. **TERMINATION CHARGES** - Any provision requiring the Agency to pay a fixed amount or liquidated damages upon termination of the agreement is hereby deleted. The Agency may only agree to reimburse a Vendor for actual costs incurred or losses sustained during the current fiscal year due to wrongful termination by the Agency prior to the end of any current agreement term.
16. **RENEWAL** - Any reference to automatic renewal is deleted. The agreement may be renewed only upon mutual written agreement of the parties.
17. **INSURANCE** - Any provision requiring the Agency to purchase insurance for Vendor's property is deleted. The State of West Virginia is insured through the Board of Risk and Insurance Management, and will provide a certificate of property insurance upon request.
18. **RIGHT TO NOTICE** - Any provision for repossession of equipment without notice is hereby deleted. However, the Agency does recognize a right of repossession with notice.
19. **ACCELERATION** - Any reference to acceleration of payments in the event of default or non-funding is hereby deleted.
20. **CONFIDENTIALITY** - Any provision regarding confidentiality of the terms and conditions of the agreement is hereby deleted. State contracts are public records under the West Virginia Freedom of Information Act.
21. **AMENDMENTS** - All amendments, modifications, alterations or changes to the agreement shall be in writing and signed by both parties. No amendment, modification, alteration or change may be made to this addendum without the express written approval of the Purchasing Division and the Attorney General.

ACCEPTED BY:

STATE OF WEST VIRGINIA

Spending Unit: _____

Signed: _____

Title: _____

Date: _____

VENDOR

Company Name: B: B MICROSCOPES

Signed: _____

Title: _____

Date: 6/7/13

ATTACHMENT
PURCHASE ORDER NO. _____

RFD DSP1338

This agreement constitutes the entire agreement between the parties, and there are no other terms and conditions applicable to the licenses granted hereunder.

Agreed



Signature

6/7/13

Date

Office Mgr

Title

B: B Microsupps

Company Name

Signature

Date

Title

Agency/Division

490 Lowries Run Road
Pittsburgh, PA 15237

Phone: 800-433-1749

Fax: 877-768-1984

Quote No: 2013-SS1-502 - 1

6/7/2013

Tara Lyle
State of West Virginia
Dept of Administration - Purchasing Division
2019 Washington Street East
P.O. Box 50130
Charleston, WV 25305-0130

Sales Rep: Sales Support-1

Phone: (800) 433-1749 Ext. 137

Email:

*Email all Purchase Orders to
Orders@BBMicro.com*

Phone: (304) 558-2544

Fax:

E-Mail:

LUMENERA 5MP CCD COLOR DIGITAL CAMERA W/IMAGING SOFTWARE

Catalog No.	Product Description	Qty	Price	Extension
1	OLUM-IN25C INFINITY2-5C:5MP DIGITAL COLOR CAMERA, CCD, USB 2.0	4	\$4,500.00	\$18,000.00
			9.48889% Discount: -\$1,708.00	\$16,292.00
			TOTAL:	\$16,292.00

Terms & Conditions:

FOB Dest

Net 30

PLEASE NOTE:

PLEASE NOTE:

Price is Valid for 30 Days fm bid close date

Payment Terms - Net 30 Days

A Minimum of 20% Restocking Fee May Apply on Any returned Items.

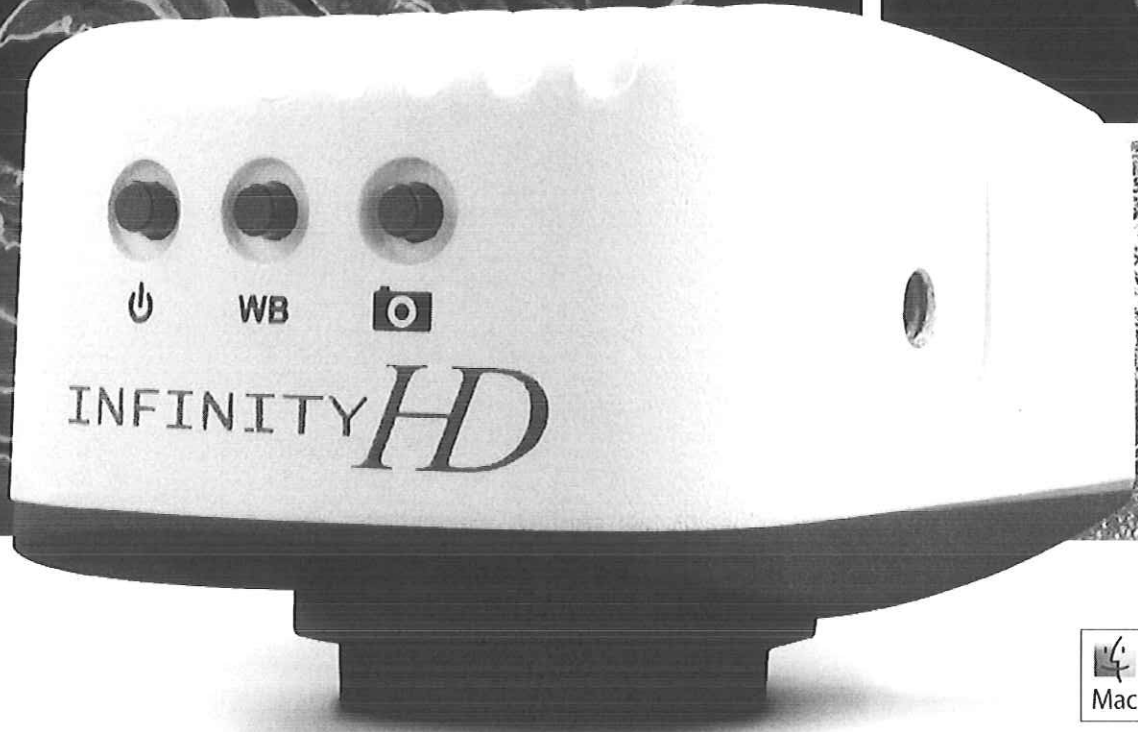
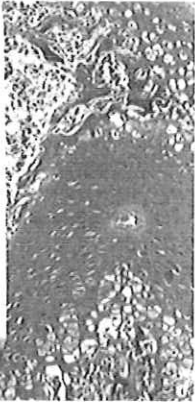
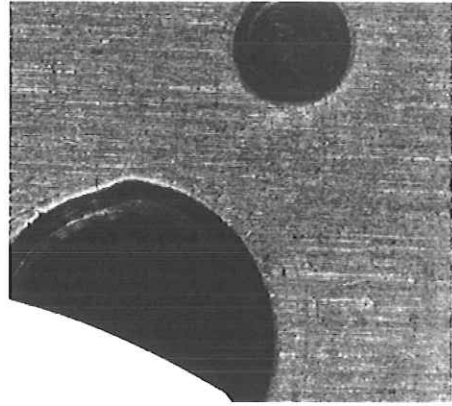
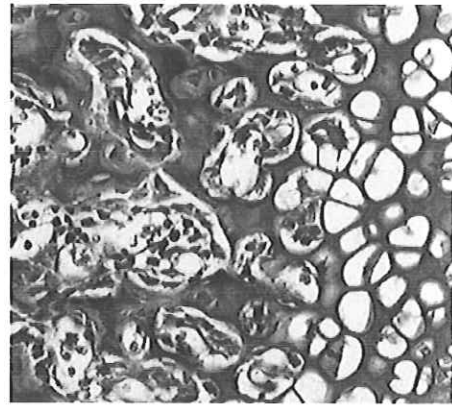
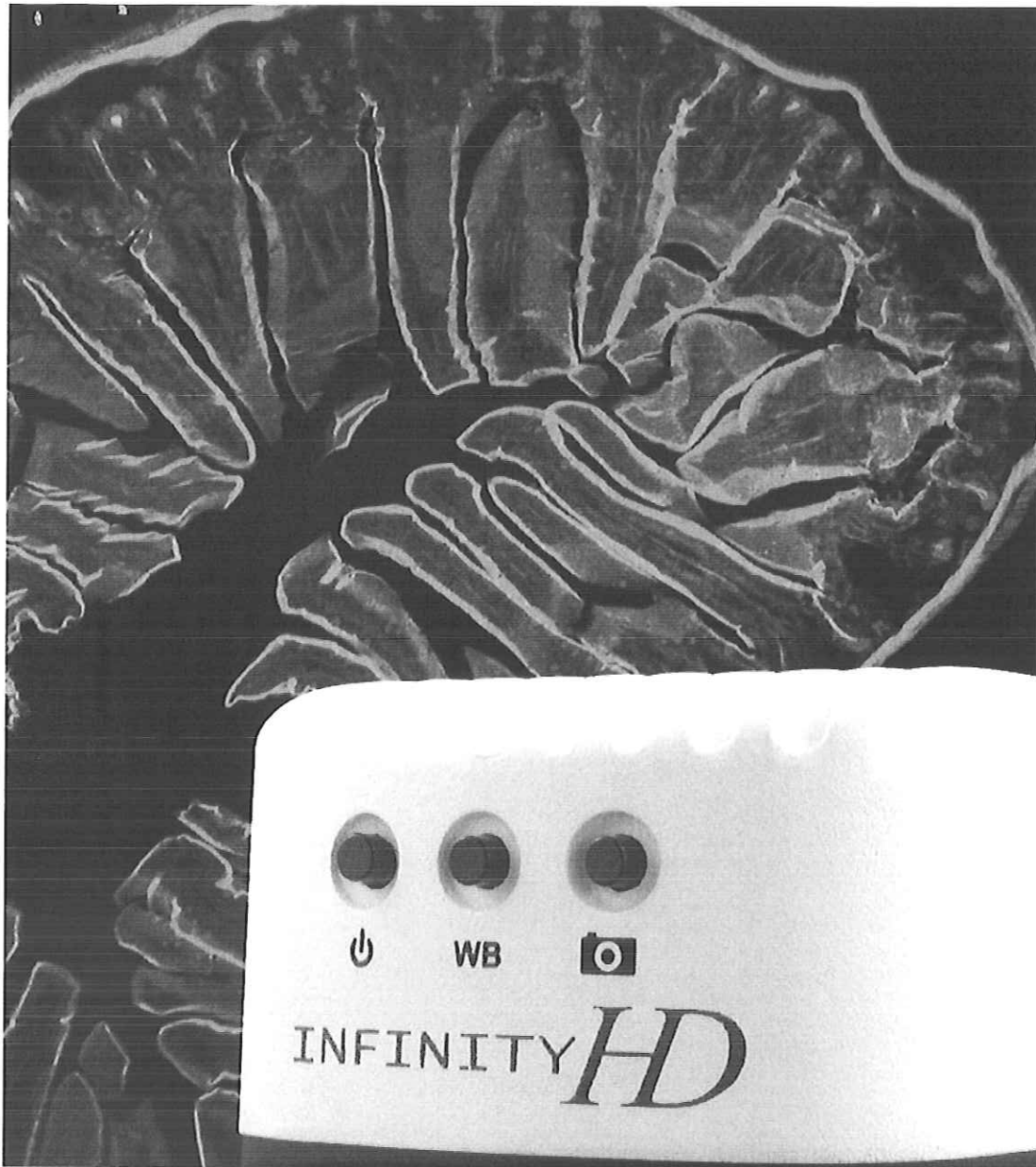
OLYMPUS WARRANTY:

Five Years on Mechanics and Optics.

One Year Electrical.

As Specified by the Olympus Manufacturer's Warranty.

This is an official price quotation for the products which you have shown an interest to purchase. The prices listed in this quotation as well as any package pricing apply to the entire quote as presented. Changes, additions or deletions from this quotation may result in pricing adjustments. Catalog numbers may change from time to time.



INFINITY DIGITAL MICROSCOPY CAMERAS

Produce crystal clear, vibrant images with Lumenera's INFINITY microscopy cameras. Our user friendly USB 2.0 cameras range in resolution from 1.4 to 32 megapixel and feature CMOS, CCD, High Definition (HD), low light CCD, large format, research-grade and pixel shifting technologies. As one of the most respected digital camera manufacturers in the scientific market, we install thousands of INFINITY cameras each year into life science, clinical and industrial applications. Trust Lumenera to provide high quality, scientific-grade cameras complete with feature rich software packages at the best price-to-performance ratio in the market.

Contact us to determine how you can benefit from Lumenera's high-quality, reliable products.



2-5C
www.lumenera.com

Why Lumenera, Why INFINITY

Extensive Product Line

Life science researchers, clinical pathologists and industrial technicians count on our exceptional color reproduction, lasting quality microscopy cameras, complete with user friendly software packages. Select from Lumenera's cost-effective CMOS cameras with extremely fast frame rates, our HD camera with full 1080p60 preview and superb color reproduction, or our CCD solutions with high dynamic range and outstanding color fidelity. Don't regret your camera purchase decision - choose Lumenera.

Centralized Research, Development & Manufacturing

Research, development and manufacturing are tightly controlled in one location ensuring the highest standard of quality from design to delivery. To ensure a timely product supply, Lumenera has established close, collaborative relationships with vendors and provides its own in-house manufacturing inspection and quality controls. As a testament to our high quality standards we continue to invest in research and development in order to maintain our reputation as a leading provider of high-performance digital imaging solutions. As a Lumenera customer you will benefit from our ongoing success and solid growth for years to come.

Industry Leading Technical Assistance Center

Realize your vision needs through our Technical Assistance Center (TAC). Core competencies include microscopy, software development, color algorithms, opto-electronics, laser physics, remote sensing, sensor architecture and optics. Receive timely, accurate information from our skilled team. With a focus on complete satisfaction, we draw on a large pool of expertise found throughout the company to help provide solutions to your toughest application or design challenges. Lumenera's TAC team is customer focused and prides itself on delivering timely responses to your questions.

Intuitive Software Package

Included with your USB 2.0 camera purchase is INFINITY ANALYZE and INFINITY CAPTURE software. Together, the camera and software create a complete imaging solution for your application. Take advantage of features ranging from full camera control to advanced capabilities such as measurement, video recording, annotation and the pseudo-coloring of fluorescent images. INFINITY ANALYZE is translated into eight languages (Latin Spanish, Castilian Spanish, Italian, Russian, Japanese, Chinese, Korean and French), providing life science, clinical and industrial researchers native language support. Also included is a Mac camera driver and ImageJ plug-in for select INFINITY cameras.

Research-Grade Cameras

Lumenera is integrating research-grade cameras into its product line with low noise electronics, high grade components, and Lumenera's unique thermal management technology. The end result is high quality images with extremely low noise and high dynamic range. Research-grade cameras are denoted with an R in the ordering part number. Watch for more camera models over the coming months.

USB 3.0 Cameras

Lumenera also offers USB 3.0 camera solutions. Contact us for more information.

Helpful Tools

INFINITY cameras are well known for their ease of set up and use. For immediate instruction on software features available, visit our popular step-by-step tutorials, as well as our FAQs and Knowledge Base at www.lumenera.com.

3rd Party Software Integration

Lumenera is integrated with leading software technology partners:

- Image Pro
- LanSchool
- LabVIEW
- Mideo Systems
- MATLAB
- MetaMorph
- Promicra
- Streampix
- Visiopharm
- ZView

Contact us regarding additional software packages.

Life Science & Clinical Applications

Genetics/Biology/Pathology



PARAMECIUM TAKEN WITH INFINITY1-2C



Fluorescence

Producing clear, well-contrasted fluorescent images is a challenge due to the extremely low light signals produced by the sample. Typically, images tend to be noisy and preview frame rates are reduced to a point where noticeable lag occurs. Lumenera's INFINITY cameras offer a higher dynamic range and optional thermoelectric cooling to address these challenges, resulting in smooth clear images and faster preview speeds.

Stained Samples

To ensure proper identification and diagnosis of stained samples, precise color is required. Benefit from years of INFINITY software development to produce excellent color in your biological sample. Difficult transition colors such as pinks, purples and browns that competitive cameras have difficulty duplicating, are easily reproduced by Lumenera's advanced algorithms.

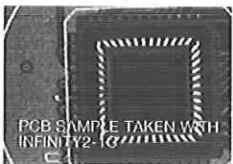
Live Imaging

Combine INFINITY software with our high-speed USB 2.0 cameras for smooth responsive live video preview, with up to 90 fps in some models deploying reduced output sizes. Use INFINITY CAPTURE to record brief video clips or use INFINITY ANALYZE to capture time lapse sequences.

Material Science—Quality Control

Metrology/Mineralogy/Metallurgy

Defect Analysis



Measurement and annotation are an important part of any quality control process. Obtain precise reproducible results through a variety of features found in INFINITY software such as simple calibration as well as extensive measurement options.

Stereo and Macro Imaging

Samples with reflection, shadowing and low-light conditions commonly found in the QC environment can be quite difficult to image. Effectively deal with washed out or dark areas, bright spots or poorly lit samples with our high dynamic range INFINITY CCD cameras, whose high sensitivity allows for proper imaging. Perform depth of focus and spherical aberration correction with the Advanced Features Module (available as an accessory).

INFINITY Camera Selection

High to Moderate Illumination
10-bit Quantitative Analysis

Brightfield/Darkfield
DIC
Live Cell Imaging
Histology/Pathology/Cytology
Semiconductor Inspection
Metrology
Documentation and Archiving
Tumor Review Boards
Education

INFINITY1
INFINITY1-2
INFINITY1-3
INFINITY1-5
INFINITYHD

Moderate to Low Illumination
12 and 14-bit Quantitative Analysis

Brightfield/Darkfield
DIC
Live Cell Imaging
Histology/Pathology/Cytology
Semiconductor Inspection
Metrology
Documentation and Archiving

INFINITY2
INFINITY2-1
INFINITY2-1R
INFINITY2-2
INFINITY2-3
INFINITY2-5
INFINITY4
INFINITY4-11

Moderate Light Fluorescence
Gel Documentation

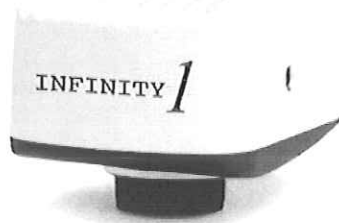
INFINITYX
INFINITYX-32

High Sensitivity
12 and 14-bit Quantitative Analysis

Brightfield/Darkfield
DIC
Live Cell Imaging
Histology/Pathology/Cytology
Semiconductor Inspection
Metrology
Documentation and Archiving
Gel Documentation

INFINITY3
INFINITY3-1
INFINITY3-1UR

Low Light Fluorescence
Chemiluminescence
Bioluminescence
Flow Analysis
GFP
FISH
NIR
FRET



INFINITY1

CMOS Cameras for Photo Documentation and High-Speed Imaging

Highlights:

- 2, 3 and 5 megapixel resolutions
- Extremely high frame rates
- High quality, cost-effective solution
- 8 or 10 bit output

The INFINITY1 series of CMOS USB 2.0 digital microscopy cameras, with resolutions as high as 5 megapixel, is specifically designed to be a cost-effective, versatile solution for a wide variety of microscopy photo documentation applications including life science, pathology, industrial inspection and geology.

Benefit from outstanding color, clarity and image detail. Easy-to-use and extremely fast frame rates are achieved through the plug-and-play, low noise USB 2.0 data interface to maximize your workflow. Combine our powerful feature-rich software package, together with the INFINITY1 series of cameras to produce accurate, reproducible results.

Models:

INFINITY1-2C 2.0 MP CMOS Color Camera
 INFINITY1-3C 3.1 MP CMOS Color Camera
 INFINITY1-5C 5.0 MP CMOS Color Camera
 INFINITY1-5M 5.0 MP CMOS Mono Camera



INFINITY2

CCD Cameras for Photo Documentation with Challenging Lighting and Color Conditions, as well as Quantitative Analysis

Highlights:

- 1, 2, 3 and 5 megapixel resolutions
- Excellent light sensitivity
- Superior color reproduction
- 12 or 14-bit output for quantitative applications
- Research-grade camera with low dark current noise

Effortlessly capture challenging images of samples in complex lighting situations with the INFINITY2 CCD series. If precise color reproduction is critical, the exceptional quality of the INFINITY2's Sony sensor meets the requirements of the most demanding applications. The INFINITY2 series of cameras offer consistent results with resolutions as high as 5 megapixel, positioning them as an ideal solution for challenging photo documentation and quantitative analysis applications in high-end scientific, medical, ophthalmic and life science applications.

In addition to the features provided by this family of cameras, the INFINITY2-1R now offers a reduced dark current noise, providing long exposures for research applications.

Models:

INFINITY2-1RC 1.4 MP CCD Color Camera
 INFINITY2-1RM 1.4 MP CCD Mono Camera
 INFINITY2-2C 2.0 MP CCD Color Camera
 INFINITY2-2M 2.0 MP CCD Mono Camera
 INFINITY2-3C 3.3 MP CCD Color Camera
 INFINITY2-5C 5.0 MP CCD Color Camera
 INFINITY2-5M 5.0 MP CCD Mono Camera



INFINITY3

CCD Cameras for Low Light Conditions and Quantitative Analysis

Highlights:

- Ultra-sensitive Sony ICX285 1.4 megapixel sensor
- Thermoelectric cooled and uncooled camera models
- Fast frame rates
- 14-bit output for quantitative applications
- GPIO provided standard on cooled models
- Research-grade camera with extremely high dynamic range

For challenging low-light applications the INFINITY3 series employs the ultra-sensitive Sony ICX285 CCD sensor. Two high dynamic range camera models are available:

- The INFINITY3-1 is thermoelectrically cooled to 25 °C below ambient and features a high signal to noise ratio, positioning it as an ideal solution for applications with extremely long integration times where dark noise must be eliminated.
- The uncooled INFINITY3-1UR is a cost-effective solution that has unmatched light sensitivity needed for low light applications including fluorescence. Highlights include an extremely high dynamic range, large 6.45 µm pixels and outstanding color reproduction.

Models:

INFINITY3-1C 1.4 MP Cooled CCD Color Camera
 INFINITY3-1M 1.4 MP Cooled CCD Mono Camera
 INFINITY3-1URC 1.4 MP CCD Color Camera
 INFINITY3-1URM 1.4 MP CCD Mono Camera

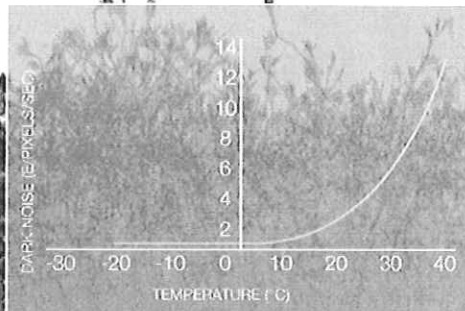
Progressive Scan CMOS and CCD Sensors

INFINITY cameras include a progressive scan sensor, ideal for imaging moving or changing objects. Progressive scan provides consistent live previews when focussing or imaging moving samples, without the tearing or color blurring normally found in interlaced cameras. This is due to the sensor array being read in its entirety versus field by field. Additionally, no settle time is required before image capture.

Please note: The INFINITY2-3 is not progressive scan.

Dark Current Noise vs. Temperature

INFINITY3 cameras are cooled to 25°C below ambient to reduce dark current noise to a negligible level.





INFINITY4

Large Format CCD Cameras with a Large Field of View and High Resolution

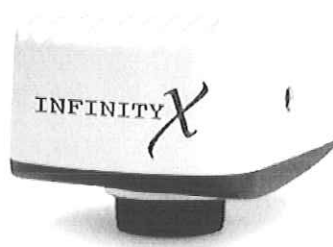
Highlights:

- 11 megapixel resolution
- Large format sensor
- 12-bit output for quantitative applications

The INFINITY4 camera series offers a large format megapixel Kodak sensor for a wide field of view. The perfect choice for demanding high resolution imaging requiring excellent color rendition. Features include a 12-bit digital output, binning, progressive scan electronic shutter, full exposure control, programmable gain, sub-windowing and region of interest. Ideal for high-end ophthalmic, medical, clinical and life science applications. GPIO for control of peripheral devices is available upon request.

Models:

INFINITY4-11C 10.7 MP CCD Color Camera
INFINITY4-11M 10.7 MP CCD Mono Camera



INFINITYX

Extremely High Resolution Pixel Shifting Cameras

Highlights:

- 32 megapixel resolution for viewing fine detail
- CCD sensors provide application versatility
- INFINITYX-32 has 12-bit output for quantitative applications

The INFINITYX-32 digital camera's sub-pixel shifting technology provides variable resolution capture at 2, 8, 16 and 32 megapixel. High resolution, combined with the excellent sensitivity of a CCD, make this an excellent general camera for virtually any application. In addition to high resolution, pixel-shifting cameras have the added advantage of acquiring all three color channels for each pixel, ensuring the highest possible quality of color reproduction.

Models:

INFINITYX-32C 32 MP CCD Color Camera
INFINITYX-32M 32 MP CCD Mono Camera



INFINITYHD

1080p60 High Definition(HD) Camera
Direct-Connect to HDMI Monitor

Highlights:

- 1080p60 HD camera
- Direct output to HDMI monitor
- 1/3" (16:9) CMOS 2 megapixel sensor
- 3 on-camera buttons for power, white balance and real-time, low latency capture

A stand-alone, high definition camera offering full 1080p60 preview with superb color reproduction and smooth sample manipulation on the preview without any lag. Runs at the required 60 fps needed for true high definition. Stream live video direct-to-HDMI monitor (no need for a PC), or capture images via USB 2.0. Extremely fast response times quickly react to lighting changes in any life science, clinical or material application. INFINITYHD software included.

Models:

INFINITYHD 2 MP CMOS HD Color Camera

INFINITY Software

All Lumenera INFINITY cameras include INFINITY ANALYZE software at no extra charge, allowing complete camera control and advanced image acquisition and analysis.

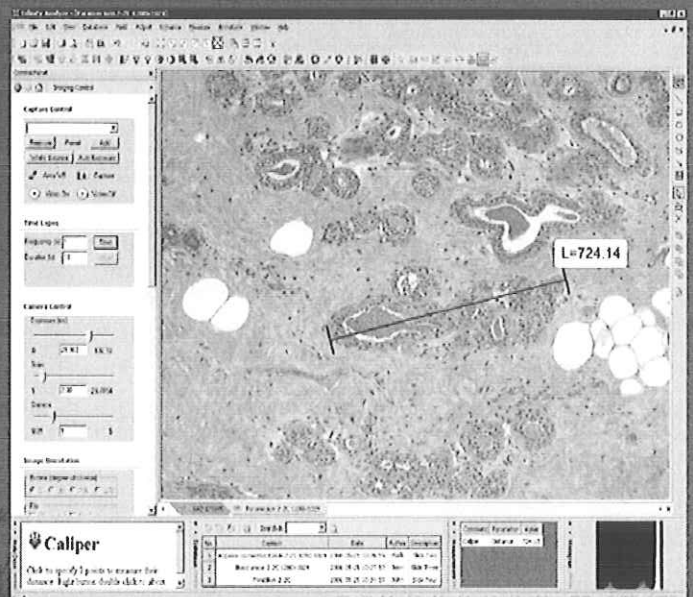
Also included is INFINITY CAPTURE, an intuitive user interface that contains all of the basic features needed to control the camera and capture images.

Easily integrate your INFINITY camera with 3rd party software applications through our TWAIN and DirectX/WDM Interface (included) as well as 3rd party drivers for most image analysis packages.

An Advanced Features Model is available as an accessory to perform depth of focus and spherical aberration correction.

INFINITY ANALYZE Features Include:

- Real time video preview
- Measurement and annotation
- Archiving with search for date, author, description
- Fluorescent image composition including RGB Look-Up Tables (LUT)
- Single capture and time lapse
- Image stitching
- Automatic/manual exposure and white balance
- Hue, saturation, gain, contrast, brightness and gamma controls
- Advanced image processing
- Customize interface for specific applications
- Thumbnail worksheet
- Drag and drop measurement data to Microsoft Excel for analysis
- Save and restore camera settings
- Context sensitive help for all functions
- Optional focus enhancement
- Interactive color composition
- Available in 9 languages: English, Latin, Spanish, Castilian Spanish, Italian, Russian, Japanese, Chinese, Korean and French



Note: INFINITY ANALYZE not included with INFINITYHD, only the INFINITYHD software.

Cat. # (Color/Mono)	Megapixel	Resolution	Sensor	C-Mount Coupler	Pixel Pitch	Frame Rate	Bit Depth	Read Noise	Binning/ Sub Sampling	Region of Interest
INFINITY1										
INFINITY1-2 C	2.0	1600x1200	1/2" CMOS	0.5X	4.20	15	8 or 10	20 e-	N/Y	Y
INFINITY1-3 C	3.1	2048x1536	1/2" CMOS	0.5X	3.20	12	8 or 10	20 e-	N/Y	Y
INFINITY1-5 C or M	5.0	2592x1944	1/2.5" CMOS	0.5X	2.20	5	8 or 10	20 e-	N/Y	Y
INFINITY2										
INFINITY2-1R C or M	1.4	1392x1040	1/2" CCD	0.5X	4.65	15	8 or 14	8.5 e-	Y/Y	Y
INFINITY2-2 C or M	2.0	1616x1216	1/1.8" CCD	0.5X	4.40	12	8 or 12	12 e-	Y/Y	Y
INFINITY2-3 C	3.3	2080x1536	1/1.8" CCD	0.5X	3.45	5	8 or 12	12 e-	Y/Y	Y
INFINITY2-5 C or M	5.0	2448x2048	2/3" CCD	0.63X	3.45	8	8 or 12	12 e-	Y/Y	Y
INFINITY3										
INFINITY3-1 C or M	1.4	1392x1040	2/3" Cooled CCD	0.67X	6.45	15	8 or 12	8 e-	Y/Y	Y
INFINITY3-1UR C or M	1.4	1392x1040	2/3" CCD	0.67X	6.45	30	8 or 14	6 e-	Y/Y	Y
INFINITY4										
INFINITY4-11 C or M	10.7	4008x2672	35mm Format CCD (43.3mm)	Custom F-Mount	9.00	3.5	8 or 12	12 e-	Y/Y	Y
INFINITYX										
INFINITYX-32 C or M	32	6464x4864	1/1.8" CCD	0.5X	4.40	12	8 or 12	12 e-	Y/Y	Y
INFINITYHD										
INFINITYHD C	2.0	1920x1080	1/3" CMOS	0.33, 0.4 or 0.5X	2.70	60	8	8.7 e-	N/A	N/A

INFINITY Camera Specifications

- Auto/Manual Exposure
- Manual White Balance
- 1 to 10x Programmable Gain (varies by model)
- USB 2.0 High-Speed Interface (480 MB/s)
- Power:
 - INFINITY1, 2 & 3-1UR: USB Bus Power
 - INFINITY3 Cooled/INFINITYX: External 5 V DC – 1 A
 - INFINITY4: External 12 V DC – 1 A
 - INFINITYHD: External 5 V DC – 500 mA
- Operating Temp: 0 to 50 °C
- Operating Humidity: 5 to 95 %, Non-condensing
- Operating Systems:
 - PC: Windows XP, Windows Vista and Windows 7, 32 and 64 bit
 - Mac: 32 and 64-bit (10.6 or higher)


OEM Custom Camera Design


As a Lumenera OEM customer you can now leverage the success of the INFINITY camera line through our custom camera development. Our unique options for OEM custom software features and hardware camera design offer the following advantages:

- Improve Time-to-Market
- Reduce Development Costs
- Differentiate from the Competition

Comparing USB 2.0 to FireWire

Video performance in digital cameras is defined by the maximum frame rate at a given resolution and is measured in frames per second (fps). Both FireWire and high-speed USB 2.0 digital cameras exhibit almost identical frame rates by resolution. These frame rates are usually limited by the sensor read-out rate – not the physical interface. As an example, a 1 megapixel CCD sensor using a FireWire or USB 2.0 interface is limited to 15 or 30 fps depending on the camera model. As resolution increases, frame rates decrease.

 **USB 2.0:** 480 Mbit/s. 15 fps, plug-and-play. 99% of computers have USB 2.0 ports.

 **Firewire:** 400 Mbit/s. 15 fps. Most computers need a FireWire card installed – some laptops may not have the space required.

USB 2.0 is an ideal interface for scientific cameras, offering plug-and-play with all computers, while providing more than enough throughput for it's selected image sensors.

INFINITY Mac Software

A Mac Camera Driver and ImageJ Plug-In are available for the following INFINITY cameras:

- INFINITY1-2
- INFINITY1-3
- INFINITY1-5
- INFINITY2-1R
- INFINITY2-2
- INFINITY2-5
- INFINITY3-1
- INFINITY3-1UR
- INFINITY4-11

Visit www.lumenera.com/support/downloads/microscopy-downloads.php to download the latest version.

* Mac Software is not available for the INFINITY2-3, INFINITYHD or INFINITYX cameras.

For more information e-mail scientificsales@lumenera.com

To better serve you, Lumenera has forged strategic partnerships with distributors and system integrators world wide. Please contact us at 1 (613) 736-4077 or scientificsales@lumenera.com for details on how to order, or to join our partner program.



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STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: B & B Mi

Authorized Signature: [Signature] Date: 6/7/13

State of Pennsylvania

County of Allegheny, to-wit:

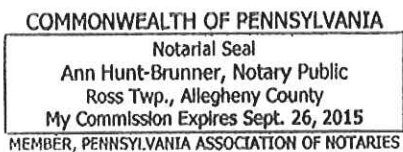
Taken, subscribed, and sworn to before me this 7th day of June, 2013

My Commission expires September 26, 2015

AFFIX SEAL HERE

NOTARY PUBLIC


[Signature]



CERTIFICATION AND SIGNATURE PAGE

By signing below, I certify that I have reviewed this Solicitation in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid or proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

B+B Microscopes, Ltd
(Company)


(Authorized Signature)

Ann Hunt-Bruner
(Representative Name, Title)

412 635 7575 877 768 1984
(Phone Number) (Fax Number)

June 7, 2013
(Date)