



The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at wvOASIS.gov. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at WVPurchasing.gov with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header  List View

General Information

Contact

Default Values

Discount

Document Information

Clarification Request

Procurement Folder: 940423

Procurement Type: Central Purchase Order

Vendor ID: 

Legal Name: HUNT OPTICS & IMAGING INC

Alias/DBA:

Total Bid: \$18,243.20

Response Date: Response Time: Responded By User ID: First Name: Last Name: Email: Phone:

SO Doc Code: CRFQ

SO Dept: 1400

SO Doc ID: AGR2200000009

Published Date: 9/27/21

Close Date: 10/7/21

Close Time: 13:30

Status: Closed

Solicitation Description: 

Total of Header Attachments: 7

Total of All Attachments: 7



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

**State of West Virginia
 Solicitation Response**

Proc Folder: 940423
Solicitation Description: ADDENDUM 1 - DIGITAL MICROSCOPE SYSTEM
Proc Type: Central Purchase Order

Solicitation Closes	Solicitation Response	Version
2021-10-07 13:30	SR 1400 ESR10062100000002261	1

VENDOR
 VC0000036629
 HUNT OPTICS & IMAGING INC

Solicitation Number: CRFQ 1400 AGR2200000009
Total Bid: 18243.20000000000072759576141 **Response Date:** 2021-10-07 **Response Time:** 11:12:32
Comments: OLYMPUS WARRANTY - 5 YEARS MECHANICS & OPTICS, 1 YR ELECTRICAL
 LUMENERA CAMERA WARRANTY - 2 YRS

FOR INFORMATION CONTACT THE BUYER
 Crystal G Husted
 (304) 558-2402
 crystal.g.husted@wv.gov

Vendor Signature X **FEIN#** **DATE**

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Laxco SeBa Pro5 Series Digital Microscope System or Equal	1.00000	EA	18193.200000	18193.20

Comm Code	Manufacturer	Specification	Model #
41100000			

Commodity Line Comments: OLYMPUS BX43 W/ 2X PL ACH OBJ; 4, 10, 20, 40, PL FL OBJ; 100X PL FL OIL OBJ; LUMENERA 20MP DIGITAL COLOR CAMERA WITH SOFTWARE AND 12: HD TOUCH DISPLAY.
DELIVERY WILL BE IN ACCORDANCE WITHIN TIME PARAMETERS LISTED IN SECTION 6.1, BUT EXPECT DELIVERY TO BE APPROX 30 DAYS ARO - MICROSCOPE; 45 DAYS ARO - CAMERA

Extended Description:

Laxco SeBa Pro5 Series Digital Microscope System or Equal

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	Installation & Training	1.00000	EA	0.000000	0.00

Comm Code	Manufacturer	Specification	Model #
41100000			

Commodity Line Comments: NO CHARGE

Extended Description:

Installation & Training

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
3	Shipping & Handling	1.00000	EA	50.000000	50.00

Comm Code	Manufacturer	Specification	Model #
78121603			

Commodity Line Comments:

Extended Description:

Shipping & Handling

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFQ AGR220000009

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

B & B Microscopes, Ltd AKA Hunt Optics & Imaging Inc
Company

[Signature]
Authorized Signature

10/4/21
Date

NOTE: This addendum acknowledgment should be submitted with the bid to expedite document processing.

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Ann Hunt, Offc mgr
(Name, Title)
Hunt Optics; Imaging Inc DBA B+B Microscopes
(Printed Name and Title)
490 Lowries Run Rd P6# PA 15237
(Address)
412-635-7575 / 877-768-1984
(Phone Number) / (Fax Number)
Ann.hunt@bbmicro.com
(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

Hunt Optics; Imaging Inc DBA B+B Microscopes Ltd
(Company)
[Signature] Offc mgr
(Authorized Signature) (Representative Name, Title)
Ann Hunt Offc Mgr
(Printed Name and Title of Authorized Representative)
10/6/21
(Date)
412-635-7575 / 877-768-1984
(Phone Number) (Fax Number)

INFINITY8 Camera Series

Digital Microscope Cameras

High performance compact microscope cameras that provide both monochrome and vivid color images for a wide range of applications

Teledyne Lumenera's INFINITY8 Microscope Camera Series range in resolution from 2MP to 20MP using the latest in advanced CMOS sensor technology for a wide range of imaging applications from low cost fluorescence imaging to ultra high-resolution stereo microscopy. These cameras are designed to provide both performance and value in today's climate of increasingly constrained lab budgets.



Software

Like all INFINITY Microscope Cameras, INFINITY8 Microscope Cameras include a licence for [INFINITY ANALYZE 7](#), the latest version of Teledyne Lumenera's powerful microscopy software for both brightfield and fluorescence imaging, image stitching, measurements, annotation, time lapse, video clips, and post-processing functions.

High-Performance

The INFINITY8-2M provides exceptional low light sensitivity for routine fluorescence imaging, while the INFINITY8-20C is ideal for high resolution imaging. For both resolution and speed, the INFINITY8-8 is available in both color and monochrome models. All color models include an IR-cut off filter for higher color fidelity.

Design

The INFINITY8 microscopy cameras have a sleek new camera body with a heat-dissipating design to reduce noise without the need for expensive cooling or fans. The sensors selected for the new INFINITY8 camera series rival legacy CCD cameras at a fraction of the price.

Versatility

The INFINITY8 cameras range from monochrome for cost-effective fluorescence imaging to ultra high-resolution color for stereo microscopy - and are compatible with all C-mount microscope brands. Breathe life into your existing microscope by adding a new camera to save time and improve workflow.

INFINITY8 CAMERA SERIES SPECIFICATIONS

	Active Resolution	Sensor Model	Frame Rate**	Pixel Size	Full Well Charge	Read Noise	Dynamic Range	Optical Format	Coupler Magnification	Part Number
 INFINITY8-2M	1608 x 1104	Sony IMX432 (1.7M)	96 fps	9.00 µm	100.4K e- (19.2K e-***)	21.6 e- (4.4 e-***)	72 dB	1.1"	1x	i8-LM00-02M
 INFINITY8-8C	3840 x 2160	Sony IMX334 (8.3M)*	44 fps	4.50 µm	7.03K e-	2.0 e-	73 dB	1/1.7"	05x - 0.63x	i8-LC00-08M
 INFINITY8-8M	3840 x 2160	Sony IMX334 (8.3M)*	44 fps	4.50 µm	7.03K e-	2.0 e-	73 dB	1/1.7"	05x - 0.63x	i8-LM00-08M
 INFINITY8-20C	5472 x 3648	Sony IMX183 (20M)*	19.6 fps	2.4 µm	14.6K e-	3.25 e-	73 dB	1"	1x	i8-LC00-20M

* Rolling Shutter sensors
 ** Maximum sustainable FPS
 *** High Conversion Gain (HCG) mode

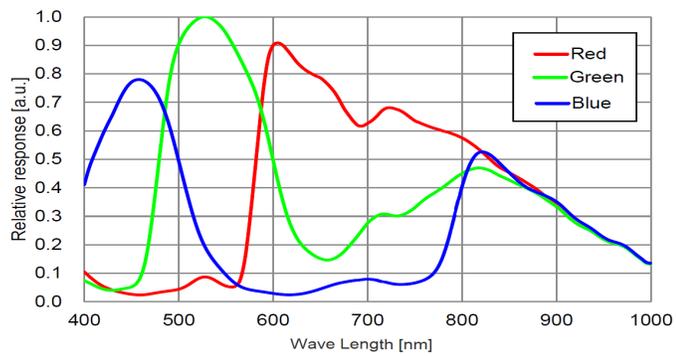
INFINITY8 CAMERA SERIES SPECIFICATIONS (COMMON TO ALL MODELS)

INFINITY8 Microscopy Cameras	
Camera Interface	USB3.1 (5 Gbit/s)
Exposure Control	Manual and automatic control
Data Format	8 or 12-bit
I/O Ports	Support for input trigger and strobe out
Image Buffer	128 MB
Lens Mount	C mount
Size (L x H x W)	41.5 mm (max) x 45 mm x 45 mm
Mass	108 g
Operating Temp	0 to 50 °C
Power Supply	5V via Power Over USB3 Cable
Power Dissipation	2.3 W to 3.6 W
Data Connector	USB3 Type micro-B (Locking Connector supported)
I/O Connector	JST# SM09B-NSHSS-TB (mating part: JST # NSHR-09V-S), GPIO cable available as an accessory
Software Platform	Teledyne Lumenera INFINITY ANALYZE 7, supported on both Windows and Mac, supported third-party plug-ins for MetaMorph and MicroManager
Included In The Box	INFINITY Microscope Camera, USB3 Micro-B to Type-A Cable (3 Meter/ 9.75 feet)

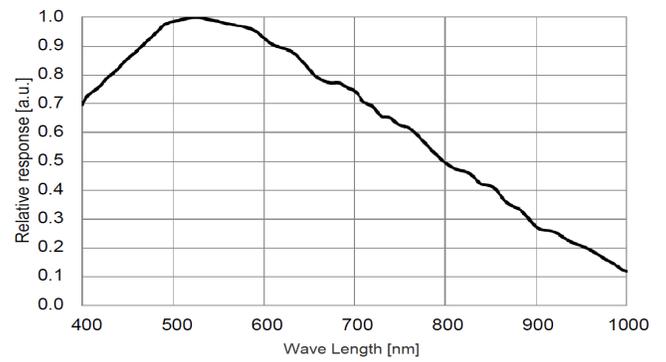


RESPONSIVITY GRAPHS

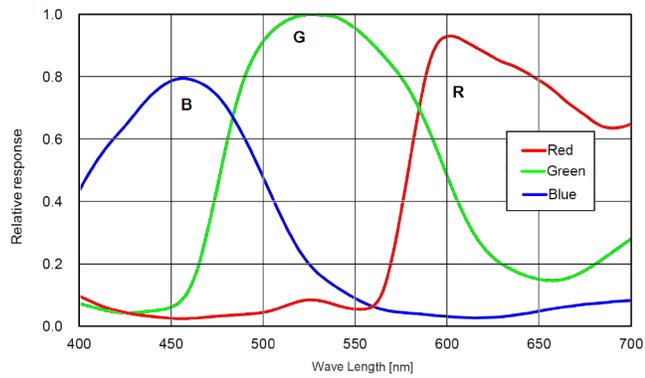
INFINITY8-8 Color



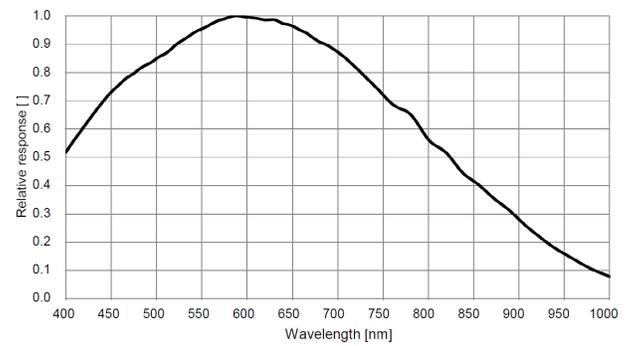
INFINITY8-8 Mono



INFINITY8-20 Color

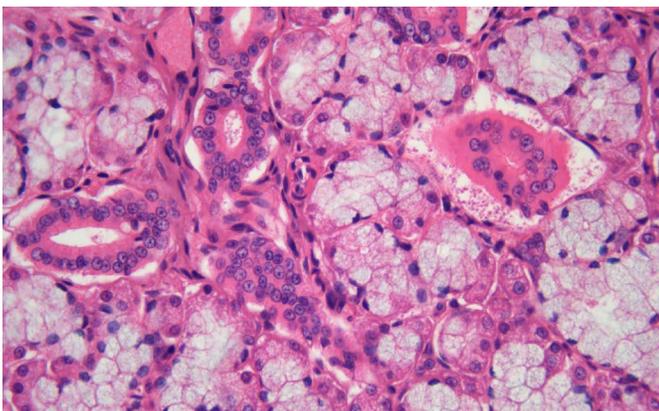


INFINITY8-2 Mono

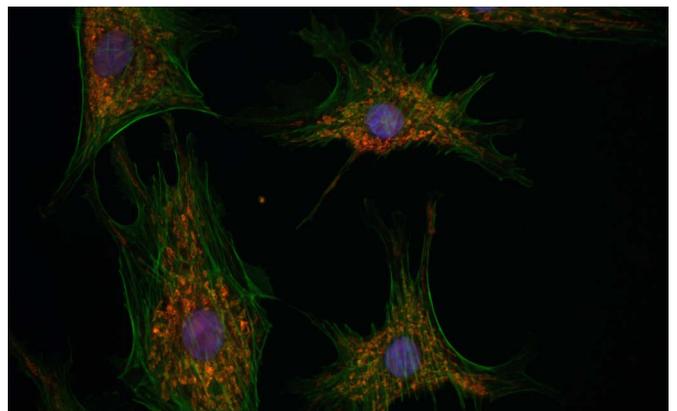


IMAGES CAPTURED WITH INFINITY8 CAMERAS

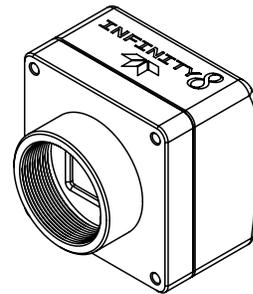
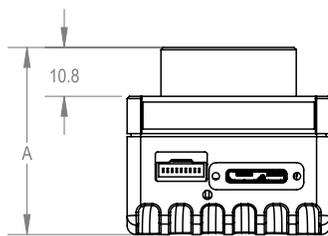
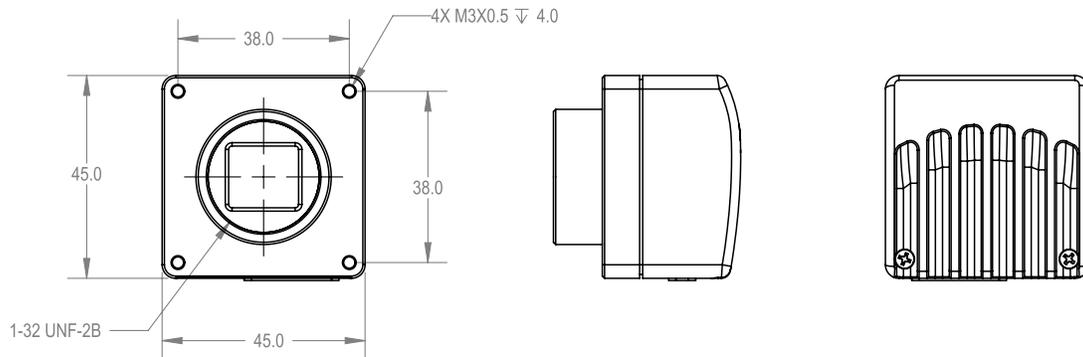
40X magnification with an INFINITY8-8C



60X magnification with an INFINITY8-2M



INFINITY8 Camera Series Specifications



MODELS	DIMENSION
	A
INFINITY8-2 INFINITY8-20	41.5
INFINITY8-8	38.2

www.teledynelumenera.com

North America

Ottawa, Canada
7 Capella Court,
(TEL) +1 613-736-4077

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Design, features, and specifications are subject to change without notice. 06172021



Microscopy cameras featuring Sony Pregius & Starvis sensors

www.teledynelumenera.com

North America

Ottawa, Canada
7 Capella Court,
(TEL) +1 613-736-4077

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 **TELEDYNE LUMENERA**
Everywhereyoulook™

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: 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, workmen's compensation benefits, permit fee or other amount due 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: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, 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: Hunt Optics Imaging Inc DBA B & B Microscopes Ltd

Authorized Signature: [Signature] Date: 10/7/21

State of PA

County of Allegheny to-wit:

Taken, subscribed, and sworn to before me this 7th day of October, 2021

My Commission expires 12/16/23, 20

AFFIX SEAL HERE

NOTARY PUBLIC

[Signature]
Purchasing Affidavit (Revised 01/19/2018)

Commonwealth of Pennsylvania - Notary Seal
Elizabeth A. Kennedy, Notary Public
Allegheny County
My commission expires December 16, 2023
Commission number 1083903
Member, Pennsylvania Association of Notaries

CRFQ AGR220000009 PRICING PAGE

Item No.	Description	Model No/Brand Name	Quantity	Unit Price
1	Laxco SeBa Pro5 Series Digital Microscope System of Equal	BX43 DIGITAL MICROSCOPE	1	\$18,143.20
2	Installation and Training	Installation & Training	1	\$0.00
3	Shipping and Handling	Shipping	1	\$100.00
Failure to use this form may result in disqualification			TOTAL BID AMOUNT	\$18,243.20

Bidder / Vendor Information

Name:	B&B Microscopes Ltd.,
Address:	490 Lowries Run Road, Pittsburgh, PA 15237
Phone:	1-800-448-3929
Email Address:	ANN.HUNT@BBMICRO.COM
Authorized Signature:	



** Optics * Imaging * Confocals **

490 Lowries Run Rd.
Pittsburgh, PA 15237

Phone: 800-433-1749

Fax: 877-768-1984

Quote No: 2021-WCH-4112 - 10

9/28/2021

Bid Clerk
Agriculture Department of West Virginia
Moorefield Field Office
60B Industrial Park Road
Moorefield, WV 26836

Sales Rep: William Hilinski, PhD

Phone: (412) 480-3116

Email: will.hilinski@bbmicro.com

Email all Purchase Orders to
Orders@BBMicro.com

Phone:

Fax:

E-Mail:

OLYMPUS BX43 DIGITAL MICROSCPE SYSTEM

Catalog No.	Product Description	Qty
1 BX43F3	BX43F-1-3; Microscope Frame with Transmitted Arm, Led Illumination	1
2 UYCP-11	UYCP-11; US Style 3-prong Power Cord	1
3 5-UL3152	U-LHLEDC-1-2; TRANSMITTED WHITE LED FOR BX43, BX46, BX63	1
4 4-U130	U-SVRB-4; RIGHT HAND MECHANICAL STAGE, RACKLESS, LONG STALK	1
5 4-U146	U-HLST-4, LEFT RELEASE SINGLE SLIDE HOLDER, THICK	1
6 BX3-SHEA-1-2	Stage Handle Extension Adapter for BX3 Manual Stages, 2 Parts	1
7 PRT-AB 4X10SA	Screw for Focus knob	1
8 PRT-AD 490600	Fine Focus Knob	1
9 6-U1218	U-SC3-8; STRAIN FREE SWING CONDENSER, NA 0.9/0.17, 1.25X-100X COVERAGE	1
10 3-U840EC	U-TLU-1-2; SINGLE PORT TUBE, TUBE LENS, ACCPTS CAM ADPTRS, ECOG	1
11 U-D6RES-1-2	6-Position coded nosepiece for BX Frames, includes slot for DIC prism	1
12 1-U2B221	PLN2X; PLAN ACHROMAT 2X OBJECTIVE, NA 0.06, WD 5.8MM	1
13 1-U2B522	UPLFLN4X; U Plan Fluorite 4X Objective, NA 0.13, WD 17MM	1



**** Optics * Imaging * Confocals ****

490 Lowries Run Rd.
Pittsburgh, PA 15237

Phone: 800-433-1749

Fax: 877-768-1984

Quote No: 2021-WCH-4112 - 10

9/28/2021

Bid Clerk
Agriculture Department of West Virginia
Moorefield Field Office
60B Industrial Park Road
Moorefield, WV 26836

Sales Rep: William Hilinski, PhD
Phone: (412) 480-3116
Email: will.hilinski@bbmicro.com

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

Phone:
Fax:
E-Mail:

OLYMPUS BX43 DIGITAL MICROSCPE SYSTEM

Catalog No.	Product Description	Qty	Price	Extension
14 1-U2B5242	UPLFLN10X2-2; U Plan Fluorite 10X Objective, NA 0.3, WD 10MM	1		
15 1-U2B5252	UPLFLN20X-2; U Plan Fluorite 20X Objective, NA 0.5, WD 2.1MM	1		
16 1-U2B5272	UPLFLN40X-2; U Plan Fluorite 40X Objective, NA 0.75, WD 0.51MM	1		
17 1-U2B53522	UPLFLN100XO2-2; U Plan Fluorite 1 00X Oil Objective, NA 1.30, WD 0.20MM	1		
18 U-V111C	U-TV1XC;C-MOUNT CAMERA ADAPTER, CENTERABLE	1		
19 OLUM-IN8-20C	INFINITY/-20C; 20MP DIGITAL COLOR CAMERA, CMOS, USB 3.1	1		
19 OLUM-PC	INFINITY SOFTWARE & CAMERA INTERFACE	1		
19 OLUM-DISPLAY	12" HD TOUCH SCREEN DISPLAY	1		
22 INSTALL	INSTALLATION & TRAINING	1		
23 SHIP	SHIPMENT SEVERAL ITEMS	1		

The New Standard in Ergonomics and Productivity

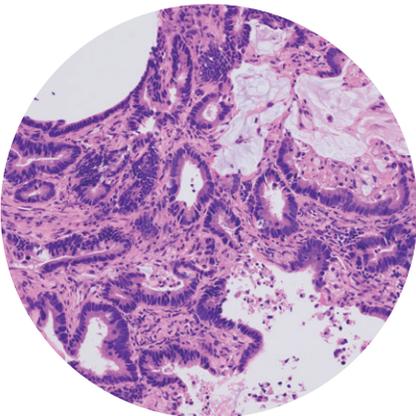




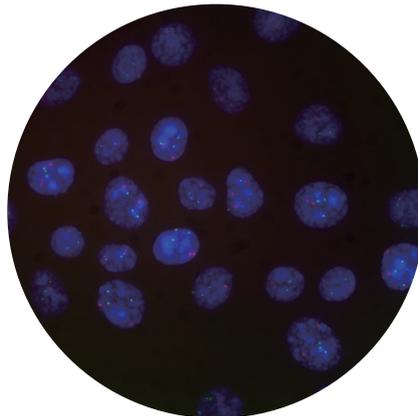
Your Choice for Clinical Applications

BX3 series combines ergonomics with Olympus' optical technology in three models— the BX53, BX43, and BX46 microscopes. BX3 series microscopes have an ergonomic design that helps keep users comfortable during extended periods of use and an intuitive control layout for fast, efficient observation and imaging.

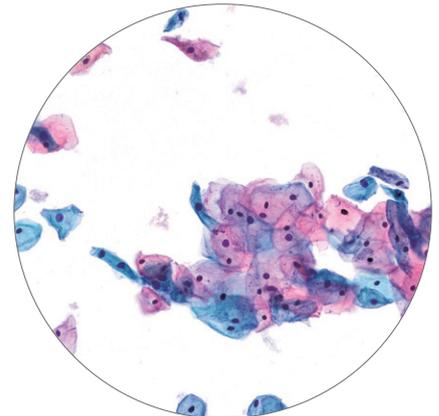
Designed for laboratory and clinical applications, white LED illumination has a high luminosity and color-rendering index so users can see their samples in true-to-life colors.



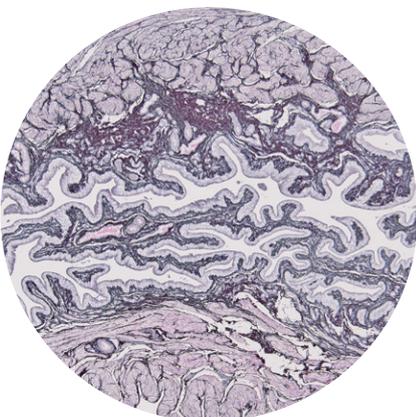
Lung (Haematoxylin and Eosin Stain)



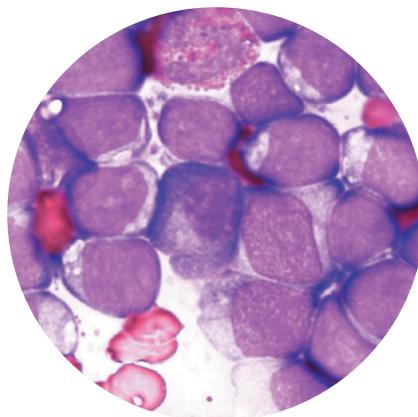
HeLa Cells (FISH Stain)



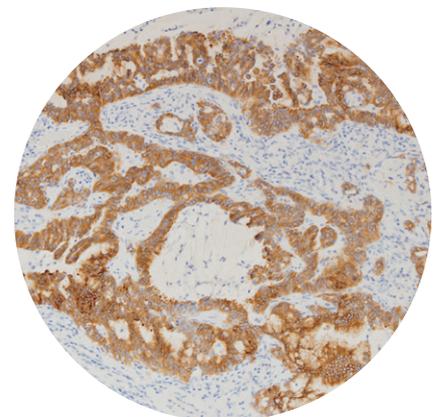
Cervical Cells (Papanicolaou Stain)



Rat Kidney (PAS)



Blood Sample (Giemsa Stain)



EML4-ALK Fused-gene Lung (Immunostaining)

BX53

For Teaching and Challenging Applications

With an LED illuminator equivalent to or better than a 100 W halogen lamp, the BX53 microscope delivers brightness that's appropriate for teaching and various contrast methods. Customize your microscope with modular units based on the observation methods you want to use. Choose from options including condensers, nosepieces, a rotating stage, objectives, and intermediate optics optimized for various observation methods, including phase contrast and fluorescence.

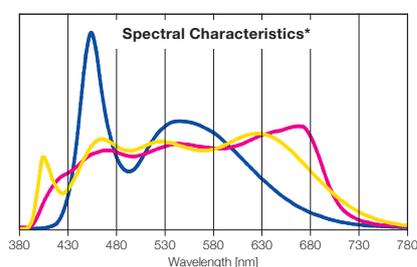
Acquire Precise Images with X Line Objectives

Improved flatness, numerical aperture, and chromatic aberration combine to deliver clear, high-resolution images with excellent color reproduction. The objectives' superior chromatic aberration management delivers better color accuracy across the entire spectrum. The elimination of violet color aberration creates clear whites and vivid pinks, improving contrast and sharpness.



Bright LED Lighting Designed for Pathology and Laboratory

Designed with spectral characteristics that mimic halogen light sources, the BX3 series' LED illumination enables users to clearly view the purple, cyan, and pink colors important in pathology, but typically difficult to see using LEDs. Users get the benefits of an LED, including consistent color temperatures and long use life, without the typical trade offs.



* This graph shows the spectral characteristics of each light source regularized with the luminosity curve. It does not compare the strength of light for each light source.



Bright Images in Multi-Head Configurations

Multi-head discussion systems are essential for training and education. With the BX53 microscope's LED illumination, up to 26 participants can view clear, bright images.

26 heads are only for brightfield observation.



Coded units to integrate with imaging software

Add an optional coded nosepiece to your BX53 microscope to automatically record and share magnification setting information for post-imaging treatments. The metadata is automatically sent to cellSens software, helping minimize mistakes and scaling errors.

cellSens is not for clinical diagnostic use.



Magnification Setting Information

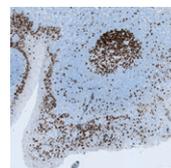
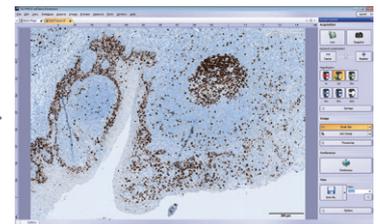


Image Data



Sent to cellSens

BX43

Excellent Performance in a Cost-Effective System

BX43 microscopes are modular, offering the versatility to change between cost-efficient and advanced configurations depending on your needs. Choose from a wide variety of modular components, including ergonomic observation tubes and stages, to customize your microscope to your application.

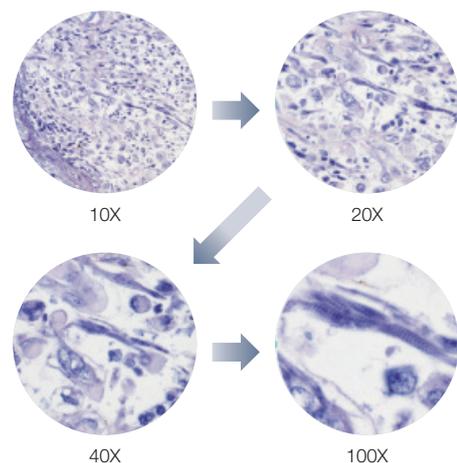
White LED with High Color Rendering— Equivalent to a 30 W Halogen Lamp

The BX43 microscope utilizes a high color rendering white LED with a luminosity equivalent to a 30 W halogen lamp. The long-lasting LED provides a consistent color temperature at any brightness level.



Maintain Brightness when Changing Magnifications

The BX3 series' light intensity manager eliminates the step of adjusting lamp brightness when changing magnification. By maintaining uniform brightness at any magnification, users can achieve their observations quickly and with reduced eye strain.





Advanced Optical Performance Accommodates Various Observation Styles

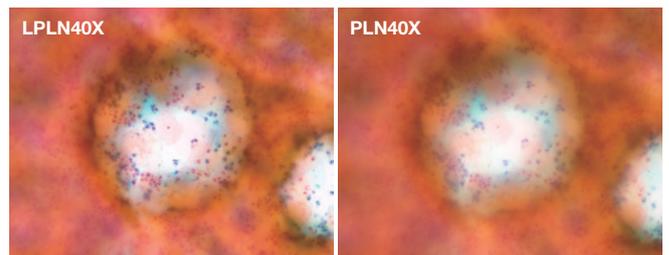
Customize your BX43 microscope with modular units. Choose from options including condensers, nosepieces, a rotating stage, objectives, and intermediate optics optimized for various observation methods.



Flexibly combine units according to the application

Observe Cellular Tissue (LPLN40X)

This objective is appropriate for imaging thick, clear samples, even at 40X magnification. The LPLN40X is equipped with a correction collar so users can adjust the spherical aberration caused by differences in cover glass thickness to get clear images.



Cervical Cell (Papanicolaou Stain)

BX46

Designed for Routine Pathology and Cytology

The BX46 is designed to meet the demands of repetitive routine microscopy. Unlike conventional microscopes where samples are focused by moving the stage, the BX46 microscope's movable nosepiece enables the stage to be fixed in the Z-plane very close to the desk's surface, keeping it closer to your hands. This design helps provide greater comfort when screening samples for long periods of time.

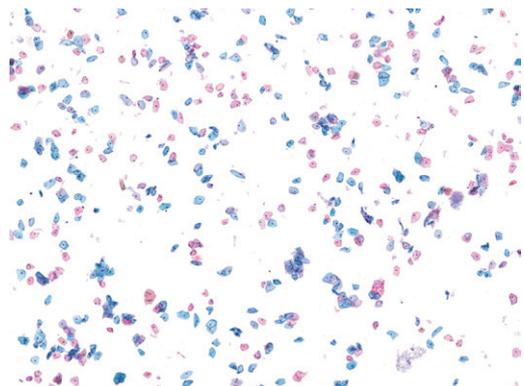
Easy, Ergonomic Manual Stage Movement

A simple finger tap is all that is needed to move the specimen. The low-position handles and low torque stage make it easy to move the specimen while keeping your arms and hands in a comfortable position.



Long-Lasting LED with High Color Rendering

Olympus' LED technology provides a color rendering index similar to that of a halogen bulb with a daylight filter. Under True Color LED illumination, stain colors appear as they do under a daylight-filtered halogen, and similar colors can be clearly differentiated. The LED provides consistent illumination throughout its long lifetime (20,000 hours).



Cervical Cell (Papanicolaou Stain)



Adjust the Scope to Fit Your Posture

Our most ergonomic option moves up and down, tilts, and extends forward and back so you can move it closer to you. With this one component, users of nearly any height can adjust the scope so that they're comfortable. The flexible ergonomic tube is suitable for labs where multiple users share a microscope since each can adjust it to accommodate their height and posture.



Tilts: 0 to 27 degrees



Extends: 55 mm



Lifts: 45 mm

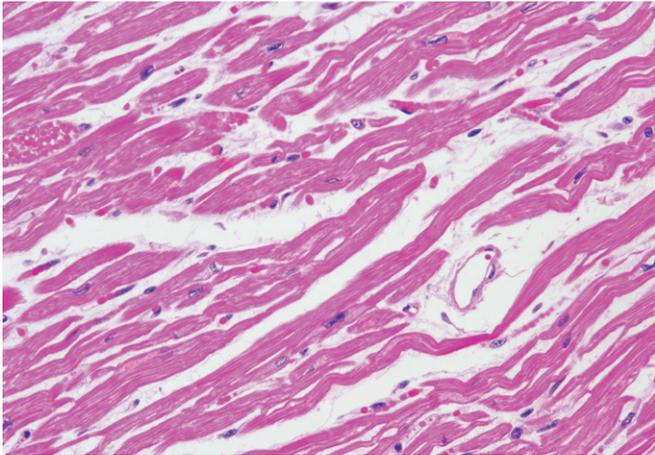


Various Observation Methods

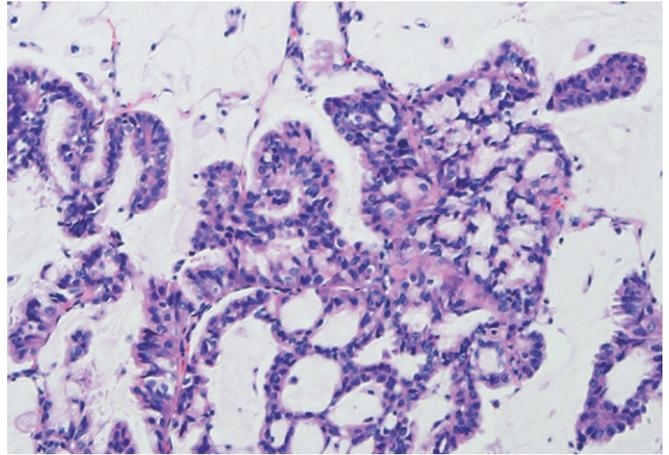
Brightfield

Get Bright Images with Excellent Resolution/Flatness at All Magnifications

Olympus' diverse line of condensers enables users to choose what they need for their application. For example, the U-SC3 swing-out condenser is suitable for observations from 1.25X to 100X, the U-LC is optimized for consecutive observations from 2X to 100X (dry).



Heart Tissue (Haematoxylin and Eosin Stain)

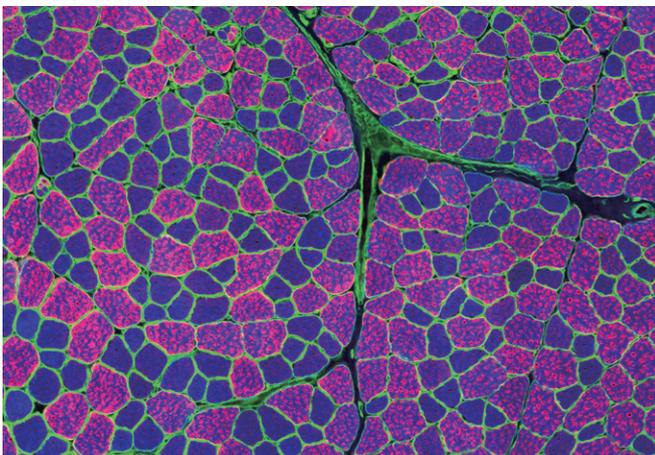


Lung Tissue with EML4-ALK fusion gene (Haematoxylin and Eosin Stain)

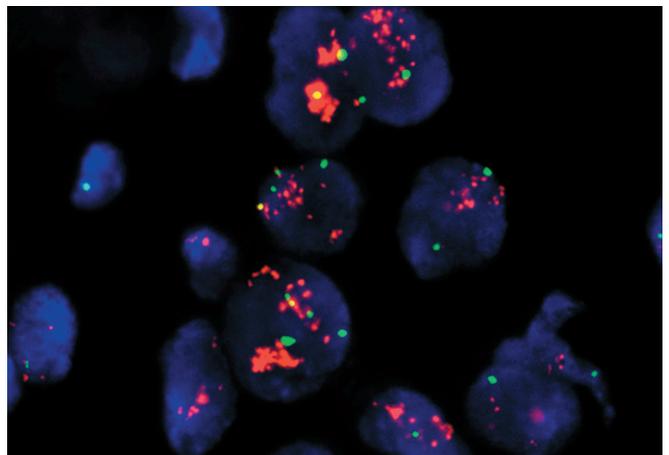
Fluorescence

Bright Fluorescence Imaging

Users can choose from a universal reflected illuminator or a coded fluorescence illuminator. Eight fluorescence mirror units can be attached to the microscope for efficient multi-color fluorescence observations. High performance filters provide efficient and bright fluorescence images.



Muscle Tissue (Fluorescence)



Mammary Gland Tissue (Fluorescence)

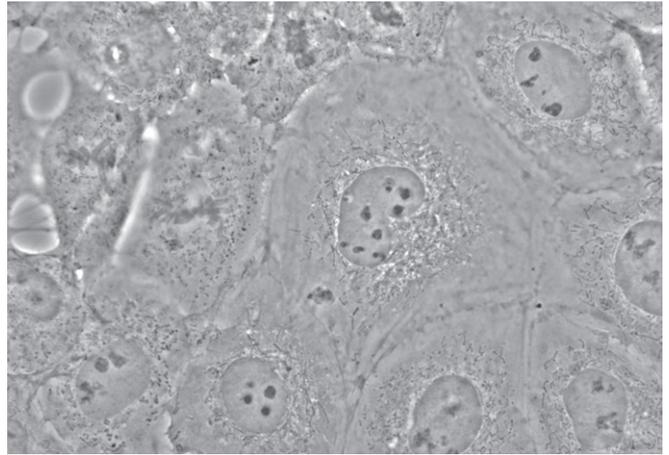
Phase Contrast

High-Contrast, High-Resolution Imaging

High-contrast phase imaging enables close observation of the interior of a cell and live bacteria. Use the UPLFLN-PH or PLN-PH objectives for phase contrast observation from 10X to 100X. With the U-PCD2 phase/darkfield condenser, users can view specimens in brightfield or darkfield. Simultaneous observation with reflected light fluorescence microscopy is also possible.



Endothelial Cells

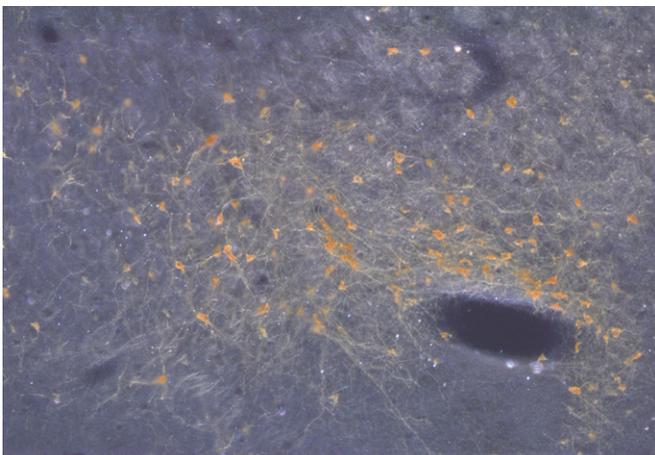


NRK-52E Cells

Darkfield

Excellent Darkfield Effect from Low to High Magnification

Choose from a 10X to 100X dry darkfield condenser or a 20X to 100X oil immersion darkfield condenser.

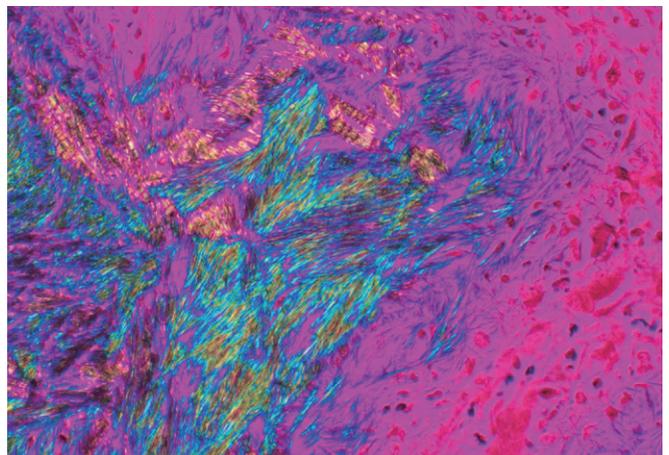


DAB-stained brain section, 30 um thick, 20x UPLSAPO Darkfield, DAB specimen showing anterograde and retrograde transport of Cholera Toxin B tracer in a chick brain with an injection of tracer in the medial Arcopallium (amygdala)

Polarized Light

High-Resolution View of Double Refraction Structure in Cells

Various compensators make it possible to observe a wide range of retardation.



Uric Acid Crystals

Images are courtesy of:

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JAPANESE FOUNDATION FOR CANCER RESEARCH
(P.9 top right)

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