



Cameras & Digital Solutions

Microscope Cameras

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Microscope Cameras



MICROSCOPE CAMERAS

B Series / TB Series / Pro Series / H Series / WF Series / Educam & VC Series / Adapters Chart / Optika Software

USB CAMERAS - B SERIES

USB 2.0 C-mount and Eyepiece Microscope Cameras



Cameras have become indispensable nowadays and OPTIKA is offering a line of remarkable solutions for digital imaging. OPTIKA B Series represents a cost-effective solution equipped with the latest technology sensors with more vivid colors and great contrast for stunning images.

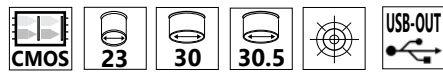
This series features Aptina CMOS sensor with excellent color reproduction, significantly high frame rates and several resolutions available to match any customer need.

Thanks to the convenience and simplicity, being extremely intuitive to install and operate, the OPTIKA B Series is recommended for educational and routinary microscopes, also as eyepiece cameras (no need for additional adapters/rings in case of monocular and binocular microscopes).

All the main operating systems like Windows, IOS, Linux are supported.

C-B1 C-B3 C-B5 C-B10

1.3 MP 3.1 MP 5.1 MP 10 MP



USB CAMERAS - Specifications

	C-B1	C-B3
Digital camera resolution	1.3 MP (1280 x 960)	3.1 MP (2048 x 1536)
Signal output	USB 2.0	USB 2.0
Sensor Size	1/3"	1/2"
Sensor technology	CMOS	CMOS
Sensor type	Aptina CMOS	Aptina CMOS
Image format	4/3	4/3
Pixel size	3.6 x 3.6 µm	3.2 x 3.2 µm
Frame rate full resolution	15 fps (1280 x 960)	12 fps (2048 x 1536)
Frame rate other resolutions	50 fps (320 x 256)	45 fps (680 x 510)
Sensitivity	1 V/lux-second	1 V/lux-second
Signal / noise ratio	44 dB	43 dB
Dynamic range	71 dB	61 dB
ADC conversion	8 Bit	8 Bit
Color Depth	1 Bit; 4 Bit; 8 Bit; 24 Bit	1 Bit ; 4 Bit; 8 Bit; 24 Bit
Exposure Time	0.14 msec - 2 sec	0.244 msec - 2 sec
Binning	1x1; 2x2; 4x4	1x1; 2x2; 3x3
IR filter	380-650 nm (IR-cut filter)	380-650 nm (IR-cut filter)
Camera power	PC USB	PC USB
C-mount	YES	YES

USB CAMERAS - B SERIES



B series cameras can be conveniently installed either on trinocular head of a microscope or (using the eyepiece adapters) also on monocular or binocular microscopes. Doing this each microscope can be used to obtain good microscopic images.



C-B5	C-B10
5.1 MP (2592 x 1944)	10 MP (3584 x 2748)
USB 2.0	USB 2.0
1/2.5"	1/2.3"
CMOS	CMOS
Aptina CMOS	Aptina CMOS
4/3	4/3
2.2 x 2.2 μm	1.67 x 1.67 μm
7 fps (2592 x 1944)	3.3 fps (3584 x 2748)
27 fps (1280x 960); 90fps (640x 480)	38 fps (896 x 684)
0.53 V/lux-second	0.31 V/lux-second
40.5 dB	34 dB
66.5 dB	65.2 dB
8 Bit	8 Bit
1 Bit; 4 Bit; 8 Bit; 24 Bit	1 Bit; 4 Bit; 8 Bit; 24 Bit
0.294 msec - 2 sec	0.4 msec - 2 sec
1x1; 2x2; 4x4	1x1; 2x2; 4x4
380-650 nm (IR-cut filter)	380-650 nm (IR-cut filter)
PC USB	PC USB
YES	YES

TABLETS - TB-3W & TB-5W



Tablet PCs with integrated Camera

Exclusive tablet PC, powerful and versatile for a great user experience. Always one step forward to ensure the latest technology!

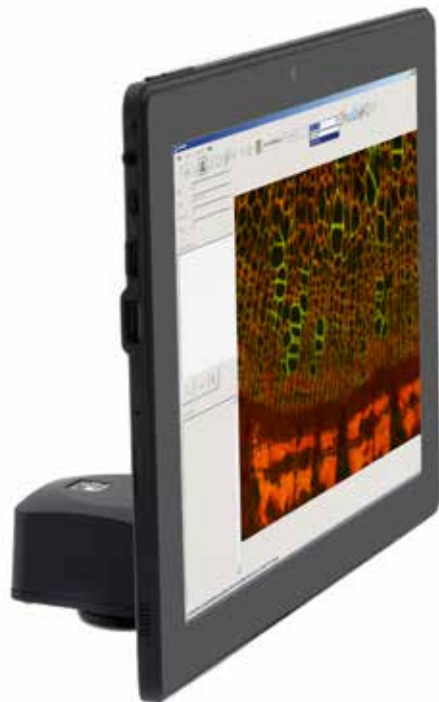
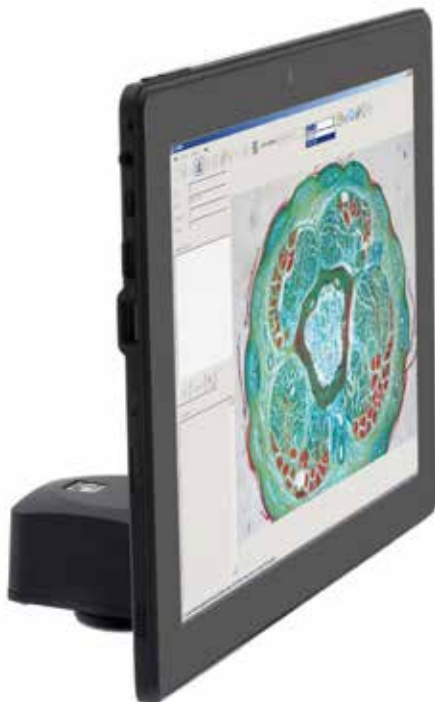
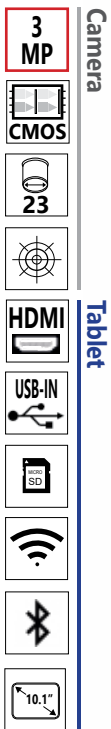
- For trinocular microscopes only
- A 2-in-1 solution that you can use like a PC, being Windows-based
- Powerful Intel processor ensuring top performance and speed
- High-resolution, vivid color graphic display
- Large touch screen of 10.1" with fast, responsive and smooth control
- Attached camera available in 3MP (TB-3W) or 5MP (TB-5W) resolution
- Holding solution for open discussion, 360° rotating
- Includes the user-friendly and intuitive Optika Vision Lite software

Unique Features

- > Simultaneous camera & power connection
- > Equipped with the latest Windows OS & Intel processor
- > Easily detachable, can be used as a laptop (keyboard included)

TB-3W

TB-5W



Windows tablet PC with large **10.1" LCD touch screen**, combined with a **3MP camera** to create the most advanced solution for digital microscopy.

Windows tablet PC with large **10.1" LCD touch screen**, combined with a **5MP camera** to create the most advanced solution for digital microscopy.

TABLETS - TB-3W & TB-5W



Perform linear measurement on your image with OPTIKA Vision Lite just by drawing a line!



TABLET TECHNICAL SPECIFICATIONS	
Model	Tablet 10.1"
Operating System	Windows 10 64-bit
Language	Multilanguages already installed
CPU	Intel® Atom™ Z830, Quad core
CPU speed	1.92 GHz
Graphics Card	Intel® HD Graphics GEN8-LP 10/12 EU
Memory	Ram 4 GB LPDDR3
LCD display	LED 10.1" IPS Multi Touch Screen
LCD resolution	1920x1080, 16/9 Full HD
Storage	Hdd 64 GB
Network	Wireless - Bluetooth 4.0
Input/output ports	USB - Microphone - Micro SD card reader - Micro HDMI - Headphone
Control Buttons	Auto rotate off, volume control
Battery Technology	Lithium-ion battery
Battery capacity	6500 mAh
Max load	18 W
Connection to the Load	Power supply 5 V 3 A
Dimensions	Thickness 8.5 mm, Height 16.7 cm, Width 26.1 cm

CAMERA TECHNICAL SPECIFICATIONS		
Digital camera resolution	3.1 MP (2048 x 1536)	5.1 MP (2592 x 1944)
Signal output	USB 2.0	USB 2.0
Sensor Size	1/2"	1/2.5"
Sensor technology	CMOS	CMOS
Sensor type	Aptina CMOS	Aptina CMOS
Image format	4/3	4/3
Pixel size	3.2 x 3.2 μm	2.2 x 2.2 μm
Frame rate full resolution	12 fps (2048 x 1536)	7 fps (2592 x 1944)
Frame rate other resolutions	45 fps (680 x 510)	27 fps (1280x 960); 90fps (640x 480)
Sensitivity	1 V/lux-second	0.53 V/lux-second
Signal / noise ratio	43 dB	40.5 dB
Dynamic range	61 dB	66.5 dB
ADC conversion	8 Bit	8 Bit
Color Depth	1 Bit ; 4 Bit; 8 Bit; 24 Bit	1 Bit; 4 Bit; 8 Bit; 24 Bit
Exposure Time	0.244 msec - 2 sec	0.294 msec - 2 sec
Binning	1x1; 2x2; 3x3	1x1; 2x2; 4x4
IR filter	380-650 nm (IR-cut filter)	380-650 nm (IR-cut filter)
Camera power	PC USB	PC USB
C-mount	YES	YES

USB CAMERAS - PRO Series

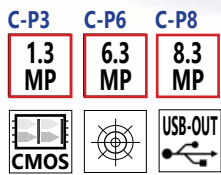
High-Performance USB 3.0 C-mount Microscope Cameras



Do you require a high-end camera with an especially high resolution, generous dynamic range, rapid read-out rate and a USB3.0 port? If your answer is yes, then the PRO series is your choice. Its compact and elegantly designed housing conceals the very latest in camera technology. Your images will be of the highest quality and rich in contrast and detail.

OPTIKA PRO Series includes a wide range, to virtually fulfill each application demand: from routine up to high-end cooled mono-chrome or color cameras, with CMOS or CCD sensors.

Top-class SONY sensors, worldwide recognized, ensure you to capture your specimen in beautiful true-to-life color, delivering incredibly accurate colors just as you see them.



USB CAMERAS - Specifications

	C-P3	C-P6
Digital camera resolution	3.1 MP (2048 x 1536)	6.3 MP (3072 x 2048)
Signal output	USB 3.0	USB 3.0
Sensor Size	1/2.8"	1/1.8"
Sensor technology	CMOS	CMOS
Sensor type	SONY EXMOR CMOS	SONY EXMOR CMOS
Image format	4/3	3/2
Pixel size	2.5 x 2.5 μm	2.4 x 2.4 μm
Frame rate full resolution	50 fps (2048 x 1536)	30 fps (3072 x 2048)
Frame rate other resolutions	50 fps (1920 x 1080)	38 fps (1536 x 1024)
Sensitivity	600 mV at 1/30sec	425 mV at 1/30sec
Dark signal	0.15 mV at 1/30sec	0.15 mV at 1/30sec
ADC Conversion	8 Bit - 12 Bit	8 Bit - 12 Bit
Color Depth	1 Bit; 4 Bit; 8 Bit; 24 Bit	1 Bit; 4 Bit; 8 Bit; 24 Bit
Exposure Time	0.1 msec - 15 sec	0.1 msec - 15 sec
Binning	1x1	1x1; 2x2
IR filter	380-650 nm (IR-cut filter)	380-650 nm (IR-cut filter)
Camera power	PC USB	PC USB
C-mount	YES	YES

USB CAMERAS - PRO Series

Professional results can be achieved using PRO series



Incredibly sharp and high contrast images can be obtained when combined with a stereomicroscope



Various Focusable C-Mount Adapters available

C-P8
8.3 MP (3840 x 2160)
USB 3.0
1/2.5"
CMOS
SONY EXMOR CMOS
4/3
1.62 x 1.62 μm
32 fps (3840 x 2160)
65 fps (1920 x 1080)
236 mV at 1/30sec
0.1 mV at 1/30sec
8 Bit - 12 Bit
1 Bit; 4 Bit; 8 Bit; 24 Bit
0.1 msec - 15 sec
1x1; 2x2
380-650 nm (IR-cut filter)
PC USB
YES



USB CAMERAS - PRO Series



High-Performance USB 3.0 C-mount Microscope Cameras

For special applications, and requiring different observation methods, high sensor size cameras are preferred for the high sensitivity delivering high signal-to-noise ratio (low noise is achieved via cooling) and a large dynamic range.

OPTIKA Pro Cooled cameras provide an excellent sensitivity. Peltier-cooled (cooling to 45°C below ambient), with scientific-grade CMOS sensor, they ensure great performance in low light conditions, ultra-long exposure time and an impressive reliable color fidelity.

All the main operating systems like Windows, IOS, Linux are supported.

C-P6FL

6.0 MP



USB CAMERAS - Specifications

	C-P6FL
Digital camera resolution	6.0 MP (2748 x 2200)
Signal output	USB 3.0
Sensor Size	1"
Sensor technology	CCD
Sensor type	SONY ExView HAD
Image format	4/3
Pixel size	4.54 x 4.54 μm
Frame rate full resolution	7.5 fps (2748 x 2200)
Frame rate other resolutions	14 fps (1374 x 1092)
Sensitivity	1000 mV at 1/30sec
Dark signal	8 mV at 1/30sec
ADC Conversion	8 Bit - 14 Bit
Color Depth	1 Bit; 4 Bit; 8 Bit; 24 Bit
Exposure Time	0.06 msec - 1000 sec
Binning	1x1
IR filter	380-650 nm (IR-cut filter)
Camera power	PC USB
C-mount	YES

USB CAMERAS - PRO Series

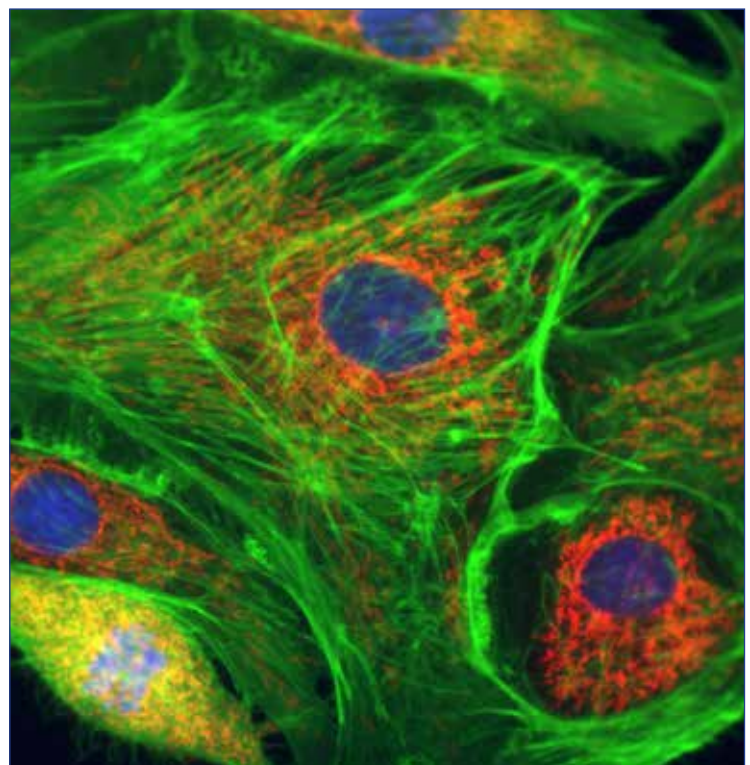
Non-cooled High-Performance CCD Camera

Thanks to its very high sensitivity, it's a perfect
Fluorescence Microscopy's companion



Various Focusable C-Mount Adapters available

Fluorescence imaging has never been so easy



USB CAMERAS - PRO COOLED Series

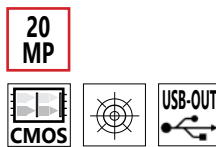


Ultra High-Performance USB 3.0 C-mount Cooled Microscope Cameras

For special applications, and requiring different observation methods, high sensor size cameras are preferred for the high sensitivity delivering high signal-to-noise ratio (low noise is achieved via cooling) and a large dynamic range.

OPTIKA Pro Cooled cameras provide an excellent sensitivity. Peltier-cooled (cooling to 45°C below ambient), with scientific-grade CMOS sensor, they ensure great performance in low light conditions, ultra-long exposure time and an impressive reliable color fidelity.

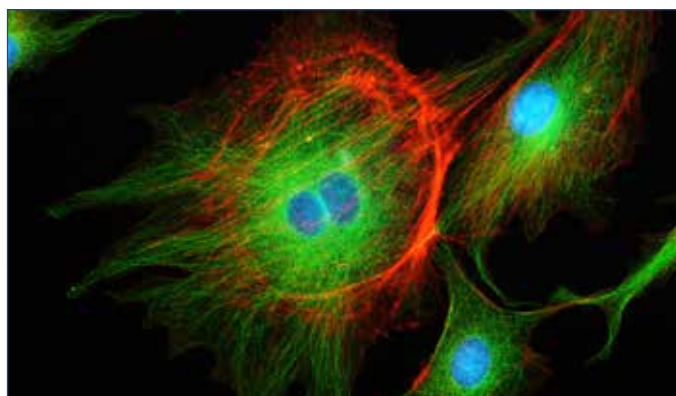
All the main operating systems like Windows, IOS, Linux are supported.



USB CAMERAS - Specifications

	C-P20CC (Color)	C-P20CM (Monochrome)
Digital camera resolution	20 MP (5440 x 3648)	20 MP (5440 x 3648)
Signal output	USB 3.0	USB 3.0
Sensor Size	1"	1"
Sensor technology	CMOS	CMOS
Sensor type	SONY EXMOR	SONY EXMOR
Image format	4/3	4/3
Pixel size	2.4 x 2.4 µm	2.4 x 2.4 µm
Frame rate full resolution	5 fps (5440 x 3648)	17.8 fps (5440 x 3648)
Frame rate other resolutions	10 fps (4096 x 2160); 15 fps (2736 x 1824); 30 fps (1824 x 1216)	41 fps (4096 x 2160); 51 fps (2736 x 1824); 64 fps (1824 x 1216)
Sensitivity	426mV at 1/30sec	388mV at 1/30sec
Dark Signal	0.21mV at 1/30sec	0.21mV at 1/30sec
Cooling System	Two-stage TE cooling system -45° below Camera Body Temperature	Two-stage TE cooling system -45° below Camera Body Temperature
ADC conversion	8 Bit - 14 Bit	14 Bit
Color Depth	1 Bit; 4 Bit; 8 Bit; 24 Bit	1 Bit; 4 Bit; 8 Bit; 24 Bit
Exposure Time	0.1 msec - 3600 sec	0.1 msec - 3600 sec
Binning	1x1; 2x2; 3x3	1x1; 2x2; 3x3
IR filter	380-650 nm (IR-cut filter)	380-650 nm (IR-cut filter)
Camera power	PC USB	PC USB
C-mount	YES	YES

USB CAMERAS - PRO COOLED Series



Durable and safe reinforced plastic case



HDMI CAMERAS - H Series

HDMI Microscope Cameras

C-HE



HDMI camera for easy operation, no compromises in quality

- C-mount connection, eyepiece adapter available
- No installation of software required when used in HDMI mode
- HDMI (720p) camera, for TV live view
- Extremely reliable color fidelity
- Lightweight cameras, to be used even on the smallest and lightest microscopes
- SD card enables image and video capturing
- Built-in function buttons for HDMI camera control

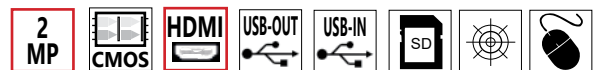


C-HP



HDMI / USB camera for extremely easy operation, and maximum flexibility

- C-mount connection, eyepiece adapter available
- No installation of software required when used in HDMI mode
- HDMI (1080p) and USB camera, for TV live view and PC use
- Reliable color fidelity
- Highly recommended for wide range of applications
- SD card enables image and video capturing
- External mouse (included) for HDMI camera control
- Optika ProView and Optika Vision Lite softwares included



HDMI CAMERAS - H Series



HDMI CAMERAS - Specifications

	C-HE	C-HP
Video resolution (USB output)	-	1920x1080 pixel
Video resolution (HDMI output)	HD 720p	Full HD 1080p
Image resolution (capture)	2Mp	2Mp
Sensor	Aptina 1\3" CMOS	Sony 1/2.8" CMOS
Image format	16\9	16\9
Frame rate	HDMI, 30 fps @ 1280x720	USB, 26fps @ 1920x1080 HDMI, 60fps @ 1920x1080
Exposure time	0,2ms to 2s	0,036ms to 8s
On board memory	-	-
External memory card	16GB SD	16GB SD
Power supply	DC12V 1A	DC12 V 1A
White balance	Auto	Auto / Manual
Gain control	Manual	Auto / Manual
Exposure control	Auto / Manual	Auto / Manual
C-mount	YES	YES

HDMI CAMERA WITH SCREEN

C-HESC

720p HDMI Microscope Camera with 11,5" LCD Screen



Exclusive system, powerful and versatile for a great user experience. Always one step forward to ensure the latest technology! It includes a 720p HDMI camera and a 11,5" LCD Screen with Full HD Resolution. They are mounted together through a jointed bracket that allows a free inclination of the screen.

- For trinocular microscopes only
- High-resolution, vivid color graphic display
- Large 11,5" screen with Full HD resolution and high contrast
- Attached 720p HDMI
- Camera tilting Bracket
- Ideal solution for open discussion



Suitable for most common observation modes

HDMI CAMERA WITH SCREEN

All-in-one solution

Impressive image quality and superb resolution



C-HESC	
Camera	C-HE Camera: 720p HDMI output; Video Capturing; Still Image Capturing; For full specifications see page 15.
Screen	11.5" Full HD HDMI LCD Screen. 360° rotating. Freely inclinable for ergonomic vision
Accessories (Included)	USB Mouse; HDMI Cable; 16GB SD Card; Camera Power Adapter; Screen Power Adapter



AUTOFOCUS HDMI CAMERA - C-HA

Full Hd HDMI C-mount Autofocus Microscope Camera



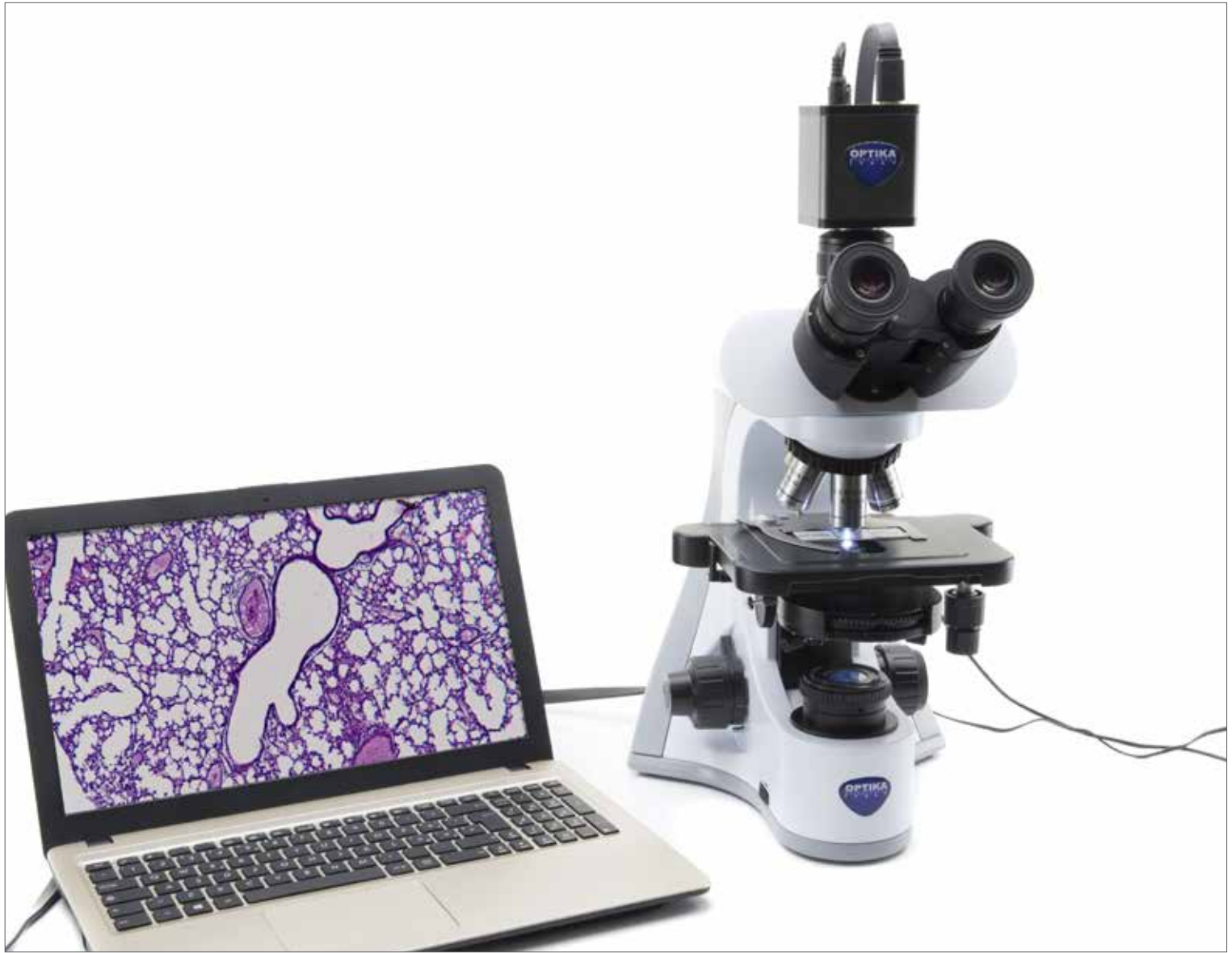
This camera is equipped with a state-of-the-art autofocus system that allows precise focusing in any condition and in real time. The result is an extremely simple, pleasant use, and able to compensate for the possible lack of parfocality of your microscope.



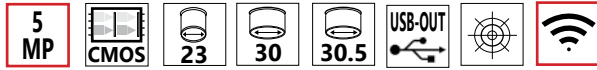
AUTOFOCUS HDMI Camera - Specifications

	C-HA
Digital camera resolution	2 MegaPixels (1920 x 1080)
Signal output	HDMI
Sensor Size	1/2,8"
Sensor technology	CMOS
Sensor type	APTINA
Image format	50 fps (1920 x 1080)
Pixel size	2,4 x 2,4 μm
Frame rate (HDMI)	50 fps (1920 x 1080)
Autofocus	10 fps (4096 x 2160); 15 fps (2736 x 1824); 30 fps (1824 x 1216)
Sensitivity	1/50 sec - 1/10000 sec
C-mount	YES
Camera power	DC 5V/1A
External Memory	SD card slot (8G)
White Balance	Auto / Manual / One push
HDR	Yes
Crosshairs	4 series of lines (vertical / horizontal), movable and color adjustable

AUTOFOCUS HDMI CAMERA - C-HA



WIFI CAMERAS - WF Series



Typology:
1080p HDMI MICROSCOPE CAMERA

Description:
HDMI C-mount Autofocus Microscope Camera

Camera with remote WiFi connection, ideal for teaching purposes and discussion groups

- Connection for both trinocular C-mount ports and eyepiece tubes
- WiFi & USB camera
- 5 MP resolution on USB mode and 2 MP resolution on WiFi mode
- Ideal for educational applications
- Lightweight cameras, to be used even on the smallest and lightest microscopes
- Direct connection via browser to share the specimen view (router is not needed)
- Unlimited users connectable (average speed depending on connected users)
- Supported by any device (PC, tablet or smartphone) with any type of browser
- Image and video capturing function when used in WiFi mode
- Includes the user-friendly and intuitive Optika Vision Lite software (USB mode)

	OPTIKAM WIFI 4083.WiFi
PC camera resolution	5.0 MegaPixels
WiFi camera resolution	2.0 MegaPixels
Signal output	USB 2.0, WiFi
Audio Signal	NO
Sensor Size	1\2.5"
Sensor technology	CMOS
Image format	4\3
Full Image size	2592 x 1944
USB Frame rate Full resolution	3 frames/sec: 2592 x 1944
USB Frame rate other resolutions	11 frames/sec: 640 x 480, 8 frames/sec: 1024 x 768
WiFi Frame rate Low resolution	2 frames/sec: 640 x 480 with 10 users
WiFi-Frame rate other resolutions	1 frames/sec: 1024 x 768 with 10 users, 1 frames/3sec: 1600 x 1200 with 10 users
Max Exposure time	Automatic
ON board Memory	NO
External Memory Card	NO
External camera power	5 V 2000mA
Cooling system	NO
White Balance	Auto / Man
Gain Control	Auto / Man
Back light control	Auto / Man
Exposure control	Auto / Man
C-Mount connection	YES
CS-Mount connection	YES, ready

Accessories included: CS- to C-mount adapter, C-mount to 23mm adapter, 23mm to 30mm and 30.5mm ring adapters, micrometer slide for software calibration, 1mm/10um, 10mm/100um, USB cable.

**USB and WiFi camera in once.
No router needed!**



WIFI CAMERAS - WF Series



EYEPIECE CAMERAS - EDUCAM & VC SERIES



4083 - 4083.1 - 4083.2 - 4083.3

USB - 4083.4

EDUCAM - Multimedia cameras to meet various requirements in the educational field

- Direct connection to TV screen and monitor
- Versatile and flexible, yet sturdy and stable at the same time: can be used as overhead projector, for the projection of drawings, as a camera for teleconferences, assemblies, meetings or as a camera for filming
- Up to 90x magnifying power for any specimen and object
- 8mm objective lens enables focus from 0,76 cm, up to an infinite distance
- Extremely sensitive microphone to record voices/sounds (Multimedia models only)
- All models are equipped with two adapters for video-microscopy (for biological and stereo microscopes).
- VC-05 - Simple eyepiece camera with CCD sensor, 420 TV Lines (PAL)



4083.4



MIC- 4083.5



VC-05

	MULTIMEDIA / 4083	MULTIMEDIA PRO / 4083.1	STUDENT / 4083.2	STUDENT PRO / 4083.3	USB 4083.4
Digital camera resolution	NO	NO	NO	NO	0.3 MegaPixels
Analog camera resolution	PAL 582 x 420	PAL 582 x 420	PAL 582 x 420	PAL 582 x 420	PAL 582 x 420
Signal output	PAL	PAL	PAL	PAL	PAL , USB2.0
Audio Signal	Analog	Analog	NO	NO	Analog
Sensor Size	1\3"	1\3"	1\3"	1\3"	1\3"
Sensor technology	CCD	CCD	CCD	CCD	CCD
Image format	4\3	4\3	4\3	4\3	4\3
Full Image size	-	-	-	-	640 x 480
Frame rate full resolution	50 frames\sec (analog mode)	50 frames\sec (analog mode)	50 frames\sec (analog mode)	50 frames\sec (analog mode)	50 frames\sec (analog mode), 25 frames\sec (digital mode)
Max Exposure time	-	-	-	-	Auto
ON board Memory	NO	NO	NO	NO	NO
External Memory Card	NO	NO	NO	NO	NO
External camera power	15V DC power supply	15V DC power supply	12V DC power supply	12V DC power supply	15V DC power supply
White Balance	Auto	Auto	Auto	Auto	Auto
Gain Control	Auto	Auto	Auto	Auto	Auto
Back light control	Auto	Auto	Auto	Auto	Auto
Exposure control	Auto	Auto	Auto	Auto	Auto
C-Mount connection	YES	YES	YES	YES	YES
CS-Mount connection	NO	NO	NO	NO	NO
Arm length	50cm	65cm	50cm	65cm	65cm
8mm objective	YES	YES	YES	YES	YES

EYEPIECE CAMERAS - EDUCAM & VC SERIES



MIC 4083.5	VC-05
NO	NO
PAL 582 x 420	PAL 582 x 420
PAL	PAL
NO	NO
1\3"	1\3"
CCD	CCD
4\3	4\3
-	-
50 frames\sec (analog mode)	50 frames\sec (analog mode)
-	-
NO	NO
NO	NO
12V DC power supply	12V DC power supply
Auto	Auto
Auto	Auto
Auto	Auto
Auto	Auto
YES	NO
NO	NO
-	-
YES	NO

	EC-2
Digital camera resolution	2 MegaPixels (1920 x 1080)
Signal output	HDMI
Sensor Size	1/2,8"
Sensor technology	CMOS
Sensor type	APTINA
Image format	50 fps (1920 x 1080)
Pixel size	2.4 x 2.4 µm
Frame rate (HDMI)	50 fps (1920 x 1080)
Autofocus	10 fps (4096 x 2160); 15 fps (2736 x 1824); 30 fps (1824 x 1216)
Sensitivity	1/50 sec - 1/10000 sec
C-mount	YES
Camera power	DC 5V/1A
External Memory	SD card slot (8G)
White Balance	Auto / Manual / One push
HDR	Yes
Crosshairs	4 series of lines (vertical / horizontal), movable and color adjustable

RECOMMENDED ADAPTERS FOR YOUR MICROSCOPE

Upright/Inverted Microscopes (C-mount projection lens)



Upright/Inverted Microscopes (Focusable C-mount adapter)



Stereomicroscopes - LAB 30 (Focusable C-mount adapter)



Stereomicroscopes - SZM / SZN / SZP Series (Focusable C-mount adapter)



		Upright/Inverted Microscopes		Stereomicroscopes		
Camera model	Sensor size	C-mount projection lens - Ecovision, B-150, B-190, B-290 Series	Focusable C-mount adapter (trino port) - B-380, B-510, B-810, B-1000, IM-3, IM-5 Series	C-mount projection lens - LAB-30, SZM, SZN, SZP Series	Focusable C-mount adapter (trino port) - LAB-30	Focusable C-mount adapter (trino port) - SZM, SZN, SZP Series
C-B1	1/3"	Included with the camera	M-620 / M-620.1	Included with the camera	ST-418	ST-090 / ST-090.1
C-B3	1/2"	Included with the camera	M-620.1 / M-620.2	Included with the camera	ST-419	ST-090.1 / ST-090.2
C-B5	1/2.5"	Included with the camera	M-620.1 / M-620.2	Included with the camera	ST-419	ST-090.1 / ST-090.2
C-B10	1/2.3"	Included with the camera	M-620.1 / M-620.2	Included with the camera	ST-419	ST-090.1 / ST-090.2
C-P3	1/2.8"	Not recommended association	M-620 / M-620.1	Not recommended association	Not recommended association	ST-090 / ST-090.1
C-P6	1/1.8"	Not recommended association	M-620.1 / M-620.2	Not recommended association	Not recommended association	ST-090.1 / ST-090.2
C-P8	1/2.5"	Not recommended association	M-620.1 / M-620.2	Not recommended association	Not recommended association	ST-090.1 / ST-090.2
C-P6FL	1"	Not recommended association	M-620.3	Not recommended association	Not recommended association	M-620.3
C-P20CC	1"	Not recommended association	M-620.3	Not recommended association	Not recommended association	M-620.3
C-P20CM	1"	Not recommended association	M-620.3	Not recommended association	Not recommended association	M-620.3
C-HP	1/1.9"	M-114 / M-115	M-620.1 / M-620.2	M-114 / M-115	ST-419	ST-090.1 / ST-090.2
C-HE	1/3"	M-114 / M-115	M-620 / M-620.1	M-114 / M-115	ST-418	ST-090 / ST-090.1
C-HA	1/2.8"	Not recommended association	M-620 / M-620.1	Not recommended association	Not recommended association	ST-090 / ST-090.1

Where you find the double option, please consider that a lower magnification lens means more field of view.

OPTIKA SOFTWARE



IMAGE ANALYSIS SOLUTIONS - OPTIKA SOFTWARE SUITES

Optika Vision Lite / Optika IS view / Optika Vision Pro Plus / Image J

OPTIKA SOFTWARE - Comparison chart

Software

• Before proceeding with the SW installation, please check the table below "Software Function list" to identify the most suitable software.



SOFTWARE FUNCTION LIST

		FUNCTION	OPTIKA PRO VIEW	OPTIKA LITE VIEW	OPTIKA VISION LITE	
GENERAL		Simultaneous management of several cameras	X	X	X	
		GUI (Graphical User Interface)	X			
		Report generator	X		X	
		Archiving	X	X	X	
		Language	Catalan	X	X	
			Chinese (simpl.)	X	X	
			Chinese (trad.)	X	X	
			Korean	X	X	
			English	X	X	X
			French	X	X	X
			German	X	X	X
			Indonesian	X	X	
			Italian	X	X	X
			Japanese	X	X	
			Polish	X	X	X
			Russian	X	X	
	Spanish	X	X	X		
	Swedish			X		
	Thai	X	X			
	Turkish	X	X			

		FUNCTION	OPTIKA PRO VIEW	OPTIKA LITE VIEW	OPTIKA VISION LITE	
MEASUREMENTS		Measurements on "live"	X			
		Measurements on "captured"	X		X	
		2D Measurements	Line	X		X
			Angle	X		
			Parallel lines	X		
			Rectangle	X		
			Ellipse	X		
			Circle	X		
			Annulus	X		
			Arc	X		
			Curve	X		
	Polygon	X				
	Particle count	X				
	Export to Excel	X		X		

OPTIKA SOFTWARE - Comparison chart

SOFTWARE FUNCTION LIST

FUNCTION		OPTIKA PRO VIEW	OPTIKA LITE VIEW	OPTIKA VISION LITE	
IMAGE ACQUISITION	Simultaneous management of several cameras	X	X		
	IMAGE acquisition	X	X	X	
	Image formats	tiff	X	X	X
		jpg	X	X	X
		bmp	X	X	X
		png	X	X	
		pcx	X	X	
		jp2	X	X	
		dcm	X	X	
	IMAGE acquisition		X	X	X
	VIDEO formats	avi	X	X	X
		wmv	X	X	X
		mp4	X	X	X
		asf	X	X	X
		3gp	X	X	X
		mov	X	X	X
		h264	X	X	X
		h265	X	X	X
	Continuous automatic exposure	X	X	X	
	Manual Exposure	X	X	X	
	Mobile spot for exposure	X	X	X	
	Resizable spot for exposure	X	X	X	
	Colour acquisition	X	X	X	
	Grey-scale acquisition	X	X	X	
	Manual Time-Lapse	X		X	
	Automatic Time-Lapse	X			
	Fast Image Acquisition	X	X	X	
	Focus Indicator	X			
	White Balance	X	X	X	
	Black balance	X			
Background correction	X				
Dark Field Correction	X	X			
Image Enhancement	X	X	X		
Live Histogram	X	X	X		
Flip	Horizontal	X	X	X	
	Vertical	X	X	X	
Rotate	X				

FUNCTION		OPTIKA PRO VIEW	OPTIKA LITE VIEW	OPTIKA VISION LITE
PROCESSING	Several function of image processing (filters)	X		
	Multiple image combining	X		
	EDF (Extended Depth of Focus)	X		
	Colour Combine (Multi-Fluorescence Imaging)	X		
	Shift Correction	X		
	HDR (High Dynamic Range)	X		
	Layer Management	X		X
	Text Overlay	X		
	Ruler Overlay	X		
	Measurement Overlay	X		
	Grids	X		X

OPTIKA Vision Lite - Extremely Intuitive Software

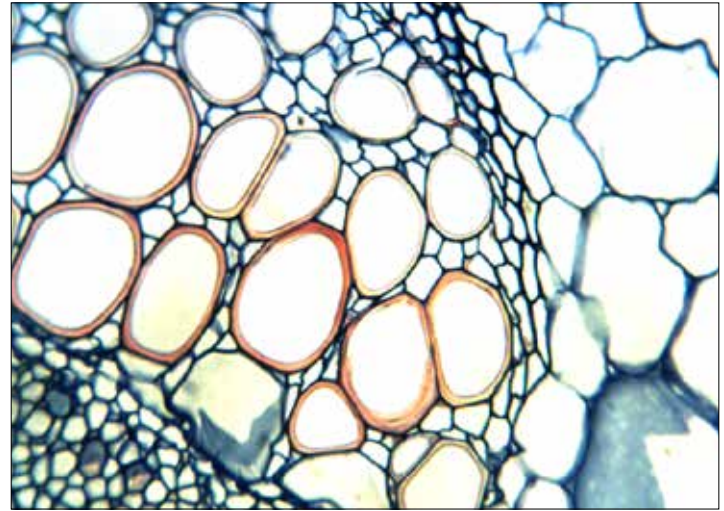
Optika Vision Lite has been designed and developed to be incredibly intuitive, simple and easy to use for customers needing a convenient solution to be combined with OPTIKAM cameras.

- » Friendly interface, multilanguage
- » Capture still images & stream live videos
- » Perform linear measurements
- » Export comprehensive reports

Friendly interface, multilanguage

Engineered for easy user interaction and optimized image acquisition, the main purpose of OPTIKA Vision Lite is ensure clear communication.

- An efficient means to efficiently completing your jobs
- Pleasant, easy-to-navigate menus
- Eight languages pre-installed, others upgradable

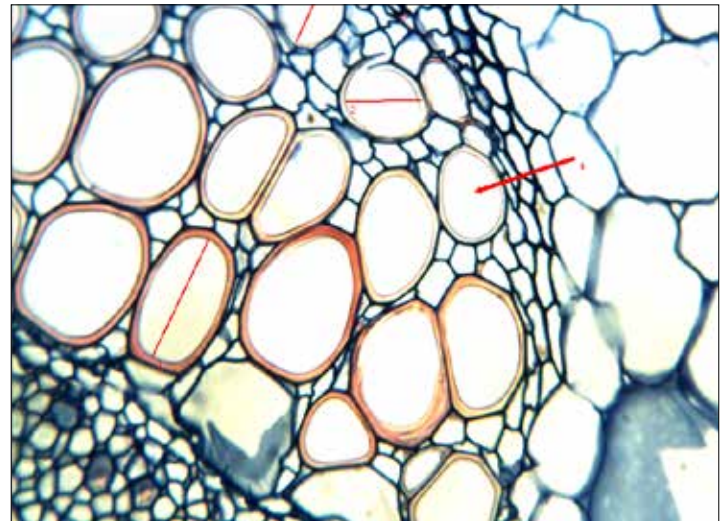


Capture still images & stream live videos

Use the live preview to accurately focus your image and change parameters to obtain the perfect final result you are looking for. Images can be saved in different formats and even as test reports, including personal comments.

Additional features:

- Image stack acquisition
- Grid addition for rapid considerations
- Image flipping option available



Perform linear measurements

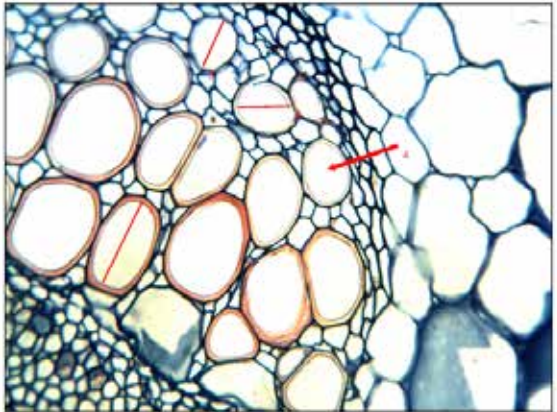
Perform linear measurements in an extremely way just by drawing a line after creating your preferred calibration based on the magnification.

- Accurate measurements through simple calibration
- Comprehensive data export (notes & measures included)
- Indicate particular objects in the image to add persona comments

Export comprehensive reports

Detailed test reports can be generated, printed and saved. Reports can be also customized with company logos.

Angular Collenchyma **OPTIKA**
TECHNOLOGY

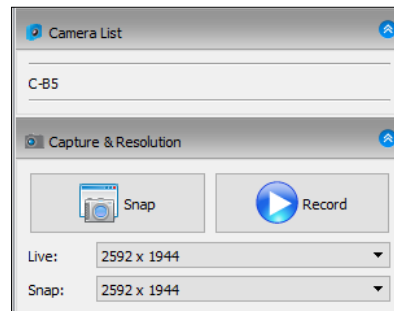
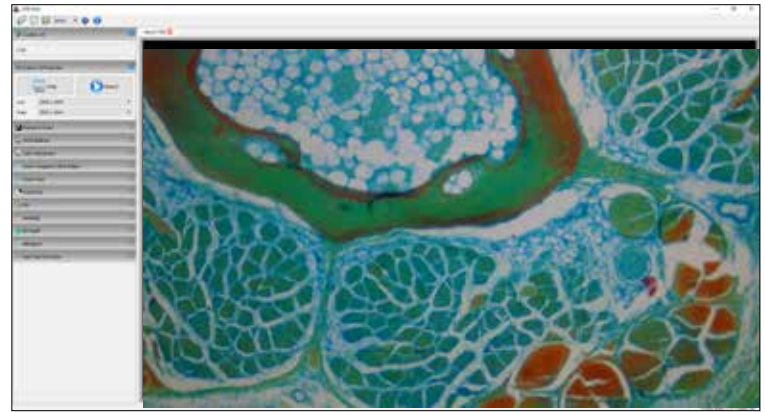


1. Length: 18,00774 micron
2. Length: 10,58396 micron
3. Length: 10,20079 micron
4. Indication

OPTIKA LITEView - Life is Easier

OPTIKA LITEView is a basic image acquisition software. The user who simply wants acquire a still image or a video, with no need to perform measurements, has, with this powerful and intuitive software, the perfect solution.

-) Simple management of «live» image
-) Acquisition of still images or video
-) Basic imaging functions
-) Background correction



Simple management of «live» image

Image preview is freely customizable by the user. A simple White Balance function with a mobile spot allows to perform the balance even on very small areas, once the specimen has been framed and focused.

Basic functions:

- Automatic or manual acquisition
- Possibility to have «live» and «capture» at different resolutions
- White Balance with mobile spot
- Background correction for the acquisition of perfectly illuminated images.

Capturing still images or video

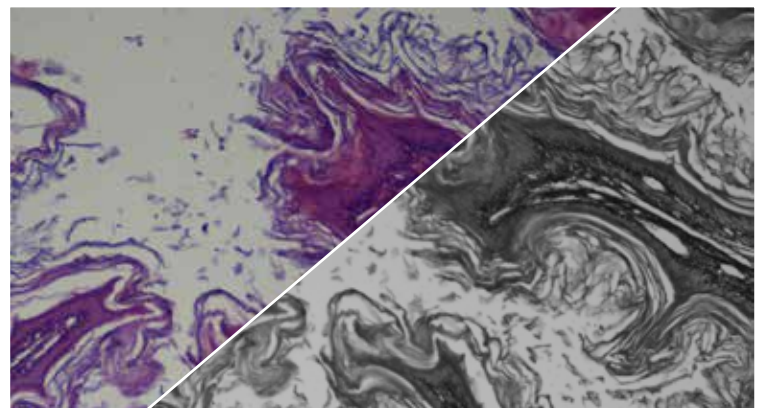
Just select the option and the software performs: acquiring still images or videos is simply and intuitive.

Basic imaging functions

Image parameters can be modified according user's needs. Color, Contrast and Gamma can be changed in real time. More, it is possible to use a color camera in «SGrey Scales» modo in order to increase the camera sensitivity.

Background Correction

Any inhomogeneity of illumination of the microscope can be corrected by using the background correction function. This allows to obtain a faithful reproduction of the image without annoying inhomogeneity due to a not perfect illumination.



Color / Grey scales



No Background correction



With Background correction

OPTIKA PROView - Professional Image Analysis

OPTIKA PROView is a professional image analysis software. The user who needs to acquire an image or video and to perform a series of processings or measurements, can easily achieve incredible results thanks to this software. PROView incorporates all the functions of the LITEView package, but in addition allows:

- White Balance and Black Balance
- Simultaneous management of several cameras
- Graphical User Interface fully customizable
- Imaging of Multichannel Fluorescence Images with «pixel shift» function
- Multilanguage Software

Beginners? Experts?

An «On-line» manual will help any user (no matter on how expert he can be) to get the best from the software

Images always perfect

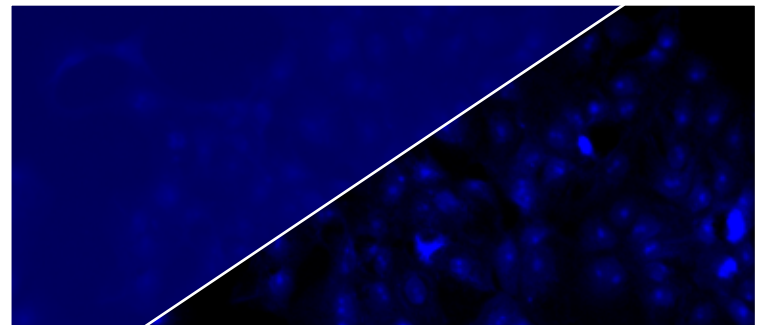
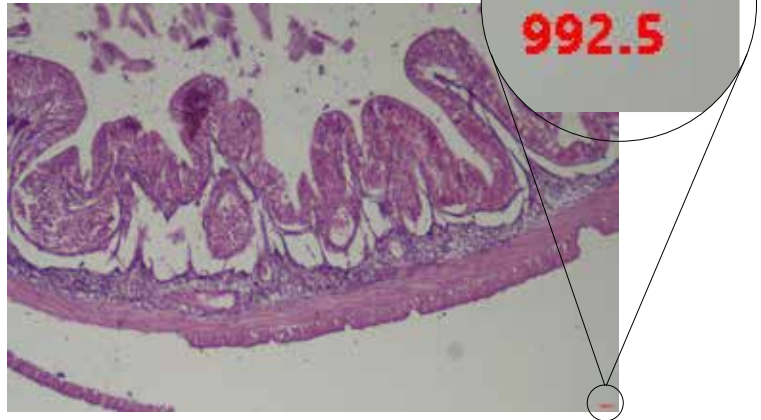
The management of the acquisition parameters allows to get always the best from your camera. White balance, black balance, background correction, «live» management of Colors, Contrast, Gamma, Gain and Exposure Time ensure to obtain a faithful image. A numerical focus indicator will ensure an optimal focusing, also on specimaens with different focal planes.

White Balance and Black Balance

It is possible to obtain the balance either on the whole frame or on a small ROI (Region Of Interest) of the image simply resizing and moving the spot in one part of the specimen

Multichannel Fluorescence Image processing

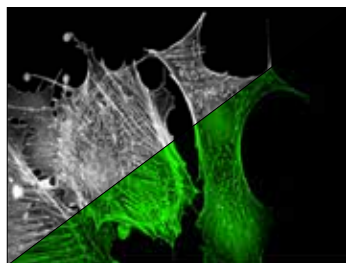
Acquire fluorescence images with a specific filtercube, use a false color for the used fluorochrome, get a single multichannel image is simply and intuitive.



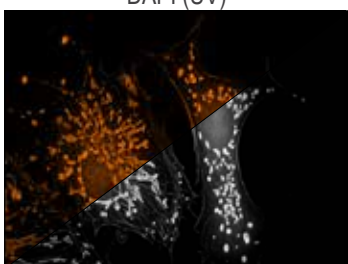
No black correction / Black correction



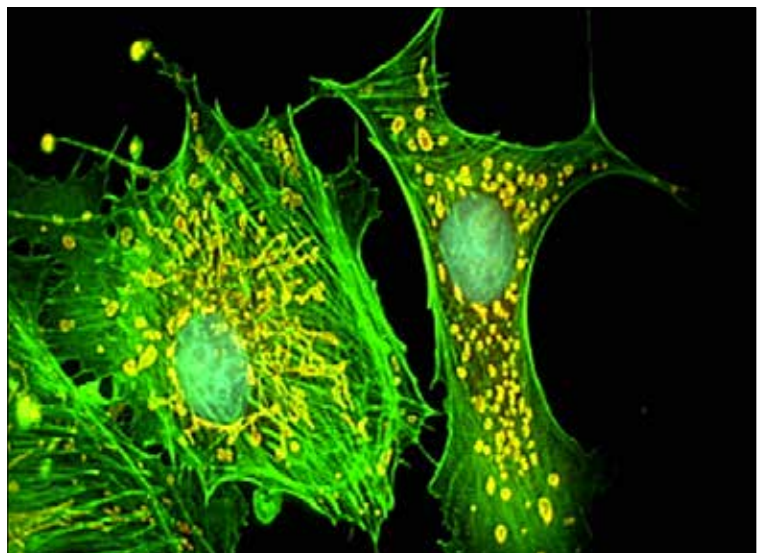
DAPI (UV)



FITC (B)



TEXAS RED (G)



Combined multichannel image

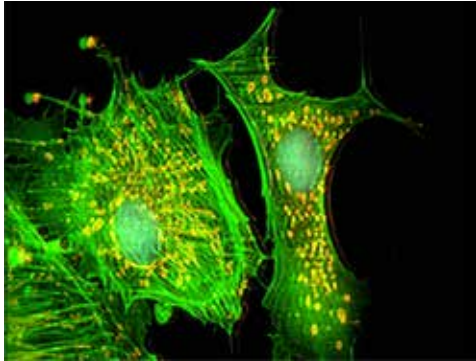
OPTIKA PROView - Professional Image Analysis

«Pixel Shift» function

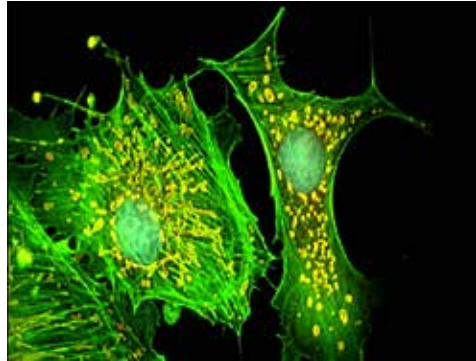
Fluorescence filter cubes, sometimes, are not perfectly aligned.

During acquisition of multichannel fluorescence images, this can cause a non perfect overlapping of the different signals, making the colocalization calculation almost impossible.

«Pixel Shift» function allows to correct these small misalignments:



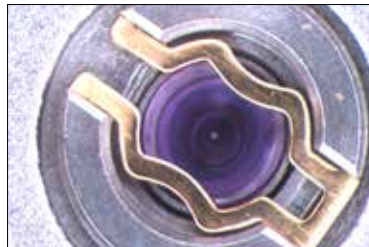
Original image



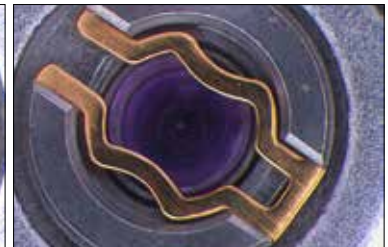
Corrected image

HDR (High Dynamic Range) acquisition

Acquisition of different images with different exposure times allows this function to create a final image where bright and dark zones of the specimen are perfectly displayed.



Standard Dynamic Range



High Dynamic Range

Extended Depth of Focus (EDF)

Acquire images with different focal planes, specially on specimens observed under a stereomicroscope, and to obtain a focused final image with a theoretical infinite focus. **EDF** function (also known as «Z-stack») allows a very refined image processing.



Single Focal Plane Images

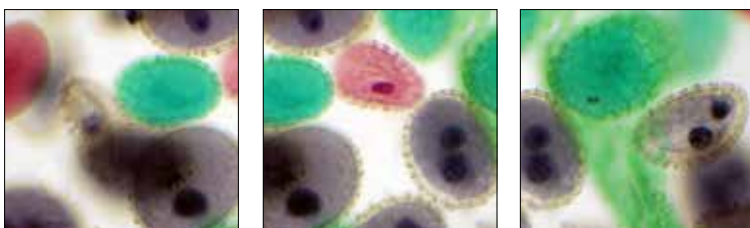


EDF Image

Stitching & Tiling

Get an image with high resolution but, at the same time, have a wide view of the specimen under observation.

Impossible? No. The multiple image alignment function allows to get a single image starting from adjacent images of the specimen.



Separate Images

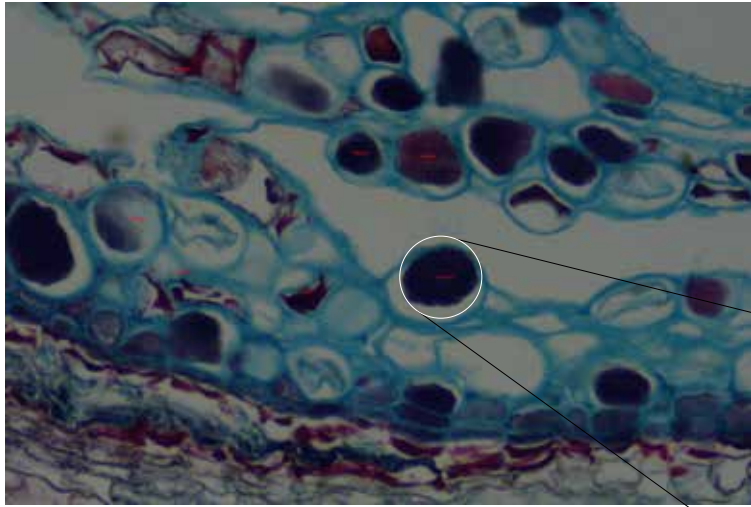


Stitched image

OPTIKA PROView - Professional Image Analysis

Measurements

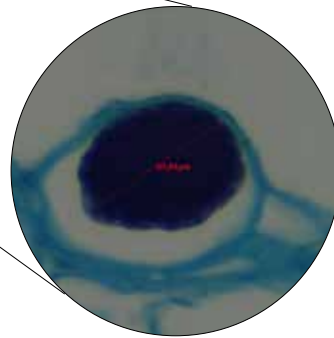
User can perform measurements on the «live» image (no need to capture an image) and on captured images.



From Beginners To Experts

Measurements available:

- linear measurements
- angles
- circles
- annuli
- polygons
- touch count



Report Generator

At the end of the analysis it is possible to export images and measurement results either on a Excel sheet and on a Report Generator in MS Word format.

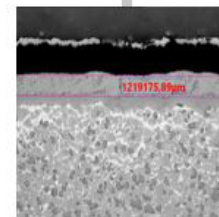
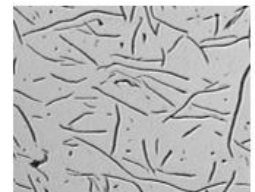
The template is freely configurable and can be modified according to laboratory standards.

OPTIKA
ITALY

Testing Material Lab

Test Report

Specimen: **Gear**
Material: **Cast iron**
Test: **Macro + Micro**
Production Batch: **GY-04-2018**
Date: 2018-04-10 08:40:09



Measurements:

Index	Length(µm)	Angle(°)	Distance(µm)
1	16154719,49, 16129320,00	179,64	1219175,89

Comments:

Operator: _____

Chief of Laboratory: _____

OPTISCAN



OPTISCAN10
Digital scanner

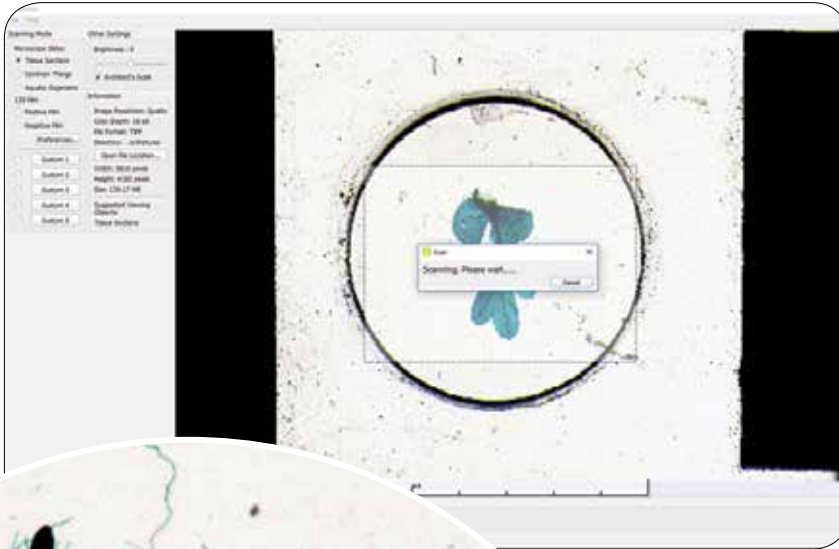
OPTISCAN10 - 4083.SC10

CONVERT YOUR GLASS SLIDES INTO DIGITAL DATA !

Rapid and high resolution scanner to convert your slides into digital slides. The digital slide can be easily manipulated to see any location at any magnifications. Digitizing slides opens up a variety of new possibilities, like:

- Creating a database to be incorporated into a laboratory information system
- Networking slide libraries to be consulted from distant facilities and research institutes
- Sharing expertise for evaluation processes and discussing
- Information storing (digital data does not deteriorate, are secure from damages and losses)

Main application fields are quality control & research, education, veterinary, histology / pathology, entomology / insectology, etc.

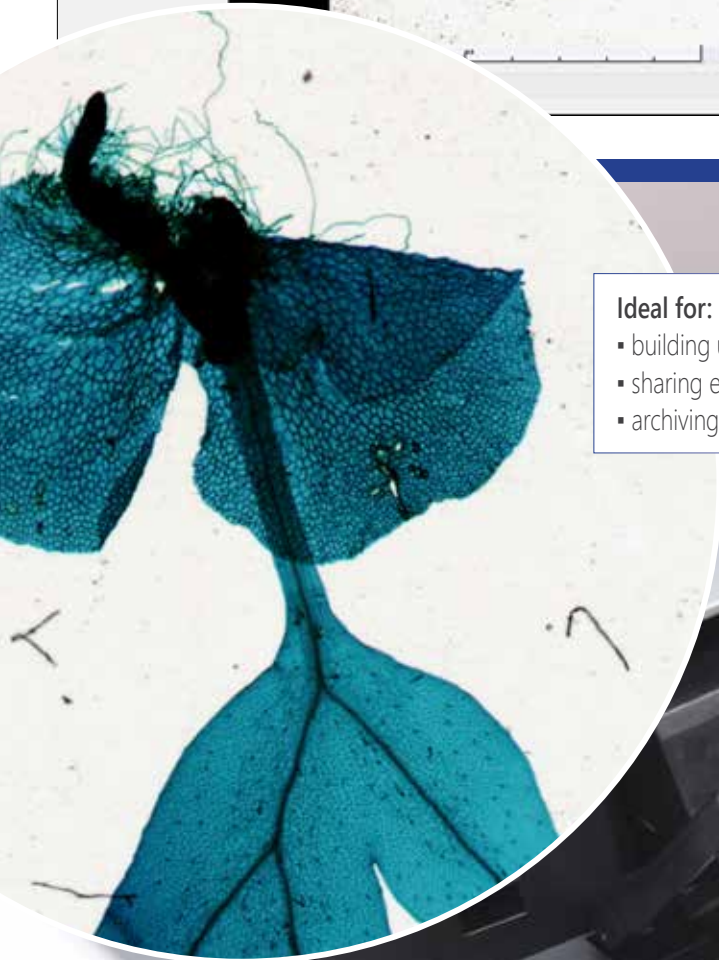


Main Features:

- High Resolution (up to 10.000 dpi)
- True & Neutral Color Fidelity
- White Balance & Distortion-free Images
- Dedicated Illumination (LED Transmitted Light)
- Efficient Scanning Area, Wide Field of View
- Impressive Scanning Speed (from 40 sec. to few minutes)
- High Sensitivity CCD Sensor
- Largest Field Of View, Better Than Any Camera

Ideal for:

- building up a comprehensive database of images for routine operations
- sharing expertise for evaluation processes
- archiving confidential patient information



OPTISCAN10 - Technical Specifications

OPTISCAN10 is an extremely convenient scanner for professionals, labs & teaching purposes, offering unmatched price/performance ratio and coming along with a comprehensive but user-friendly software.

A ultra efficient, compact scanning device carrying high resolution features for spot detection with easy operation figure.

It is equipped with a dedicated LED transmitted light system and high resolution CCD sensor, ensuring high sensitivity with low background noise.

Signal output	USB 2.0
Illumination	LED
Resolution	5'000 dpi (Normal), 10'000 dpi (Quality)
Allowed slide	Standard 24 x 75 mm
Scan view size	Any size, Max 24 x 36mm
Prescan function time	25 seconds
Scanning time (Normal)	1min 30sec (24 x 36mm); 40 sec (standard 15x15mm cover slide)
Scanning time (Quality)	2min 10sec (24 x 36mm); 1min (standard 15x15mm cover slide)
Always included	1.5 m USB cable, power supply, CD rom
System requirements	Windows XP service pack 2, Vista / win7 / win8 / win10 / 32-64 bit / USB 2.0
Supplied software	Multilanguage software for image scan
Capture features	Prescan, slide scan 24x36mm, crop scan, brightness, contrast, saturation, image flip



Headquarters and Manufacturing Facilities

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