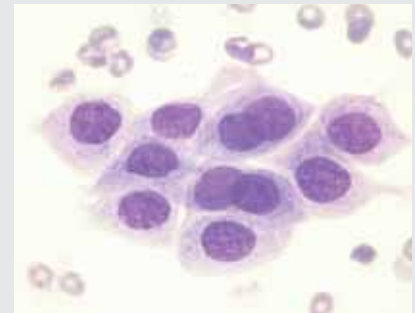
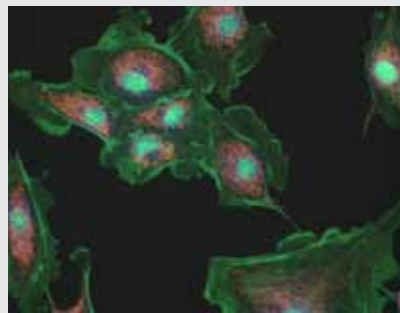
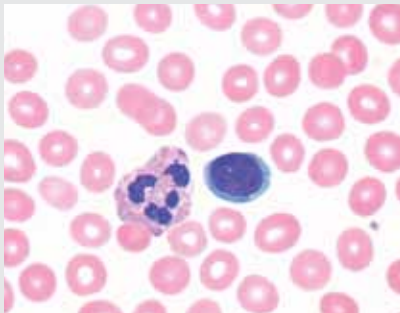


Vision Microscopy

Digital cameras for microscopy



New standards in the daily work

Applications



medicine



biology



microbiology



biology



veterinary



education



forensics



scientific research



remote counseling



specialist training



Cameras for digital microscopy

Professional series

CAM V2500 Digital camera with extra high resolution 32 megapixels

CAM V2400 Digital camera for low-light microscopy with Peltier cooling element

CAM V2200 Digital camera with extra high sensitivity

Practica series

CAM V1400 Digital camera for a wide range of applications in microscopy

CAM V1200 Digital camera for a wide range of applications in microscopy

Economy series

CAM V500 Digital camera for bright field microscopy

CAM V400 Digital camera for bright field microscopy

CAM V330 Video camera for a wide range of applications in microscopy

CAM V200 Digital eyepiece camera

CAM V100 Video eyepiece camera

Main benefits



Digital microscopy

Digital microscopy (digital pathology) is a digital environment for managing and analyzing microscopy data, which is obtained using a microscope, a camera, software and a computer.

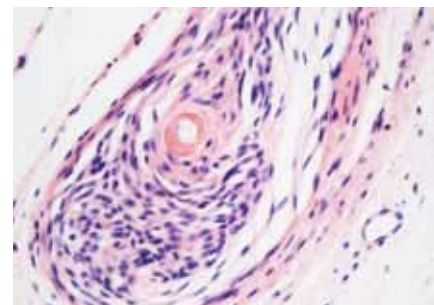
Digital microscopy allows you to attain qualitative and quantitative results, which are either impossible to receive by other means or cost and time consuming.

Digital camera

Digital camera is a connecting link between a microscope and a computer and is an essential component of digital microscopy.



Guaranteed quality of digital sample



Crystal clear, bright image with correct colour, sharpness and detail



Integration with Vision software for a wide range of applications



User-friendly camera control using a personal computer



Suitable for microscopes of most manufacturers



Resolution ranges from 1.3 to 32 megapixels depending on the camera model

Professional series



Working methods

- bright field
- dark field
- phase contrast
- DIC
- fluorescence
- stereo microscopy

CAM V2500 — digital camera with extra high resolution 32 megapixels

- Developed specifically for a wide range of applications in microscopy
- 1/1.8" CCD sensor with perfect sensitivity and low noise
- Revolutionary extra high resolution — 32 megapixels due to innovative technology
- Resolution choice: 6400x4800, 4800x3600, 3200x2400, 1600x1200 pixels
- High quality video image with high frame rate
- Colour image output
- Image transfer to a computer via high-speed USB 2.0 interface without additional intermediary devices
- Manual and automatic exposure and white balance settings for accurate colour rendering at any illumination
- Standard C-mount



Working methods

- bright field
- dark field
- phase contrast
- DIC
- fluorescence
- high sensitivity fluorescence

CAM V2400 — digital camera for low-light microscopy with Peltier cooling element

- Specialized camera for low-light microscopy with Peltier cooling element
- 2/3" CCD sensor with extra high sensitivity
- 1.4 megapixels, resolution 1392x1040 pixels
- Colour or monochrome version of image output
- High quality video image with high frame rate
- Image transfer to a computer via high-speed USB 2.0 interface without additional intermediary devices
- Camera control and power supply via USB 2.0 interface using a computer with Vision Capture software
- Manual and automatic exposure and white balance settings for accurate colour rendering at any illumination
- Standard C-mount



CAM V2200 — digital camera with extra high sensitivity

Working methods

- bright field
 - dark field
 - phase contrast
 - DIC
 - fluorescence
 - high sensitivity fluorescence
- Developed specifically for a wide range of applications in microscopy whenever extra high sensitivity and colour rendering are required
 - 2/3" CCD sensor with extra high sensitivity
 - 1.4 megapixels, resolution 1392x1040 pixels
 - Colour or monochrome version of image output
 - High quality video image with high frame rate
 - Image transfer to a computer via high-speed USB 2.0 interface without additional intermediary devices
 - Camera control and power supply via USB 2.0 interface using a computer with Vision Capture software
 - Manual and automatic exposure and white balance settings for accurate colour rendering at any illumination
 - Standard C-mount

Practica series



Working methods

- bright field
- dark field
- phase contrast
- DIC
- fluorescence
- stereo microscopy

CAM V1400 — digital camera for a wide range of applications in microscopy

- Digital camera is developed specifically for a wide range of applications in microscopy
- 1/1.8" CCD sensor with perfect sensitivity and low noise
- 2.0 megapixels, resolution 1616x1216 pixels
- Colour or monochrome version of image output
- High quality video image with high frame rate
- Image transfer to a computer via high-speed USB 2.0 interface without additional intermediary devices
- Camera control and power supply via USB 2.0 interface using a computer with Vision Capture software
- Manual and automatic exposure and white balance settings for accurate colour rendering at any illumination
- Standard C-mount



Working methods

- bright field
- dark field
- phase contrast
- DIC
- fluorescence

CAM V1200 — digital camera for a wide range of applications in microscopy

- Digital camera is developed specifically for a wide range of applications in microscopy
- 1/2" CCD sensor with perfect sensitivity and low noise
- 1.4 megapixels, resolution 1392x1040 pixels
- Colour or monochrome version of image output
- High quality video image with high frame rate
- Image transfer to a computer via high-speed USB 2.0 interface without additional intermediary devices
- Camera control and power supply via USB 2.0 interface using a computer with Vision Capture software
- Manual and automatic exposure and white balance settings for accurate colour rendering at any illumination
- Standard C-mount

Economy series



Working methods

- bright field
- dark field
- phase contrast

CAM V500 — digital camera for bright field microscopy

- Digital camera is developed specifically for a wide range of applications in bright field microscopy
- 1.5 megapixels, resolution 1440x1080 pixels
- Wide view of the captured image
- Colour image output
- High quality video image with high frame rate
- Image transfer to a computer via high-speed USB 2.0 interface without additional intermediary devices
- Camera control and power supply via USB 2.0 interface using a computer with Vision Capture software
- Manual and automatic exposure and white balance settings for accurate colour rendering at any illumination
- Standard C-mount



Working methods

- bright field
- dark field
- stereo microscopy

CAM V400 — digital camera for bright field microscopy

- Digital camera is developed specifically for a wide range of applications in bright field microscopy
- 1.3 megapixels, resolution 1280x1024 pixels
- Wide view of the captured image
- Colour image output
- Image transfer to a computer via high-speed USB 2.0 interface without additional intermediary devices
- Camera control via USB 2.0 interface
- Manual and automatic exposure and white balance settings
- Standard C-mount

Economy series



Working methods

- bright field
- dark field
- phase contrast
- DIC
- polarization
- stereo microscopy



Working methods

- bright field
- dark field



Working methods

- bright field
- dark field

CAM V330 — video camera for a wide range of applications in microscopy

- Video camera is developed specifically for a wide range of applications in microscopy
- 1/2" CCD sensor with perfect sensitivity
- Colour image output
- Connection to a video monitor or a projector via S-Video/RCA input
- Connection to a personal computer with frame grabber
- Resolution: 480 TV lines
- Signal Processing for Digital Image Enhancement
- Flare compensation
- Manual and automatic exposure and white balance settings
- Minimum illumination 0.1 lux at F 1.2
- Standard C-mount

CAM V200 — digital eyepiece camera

- Camera is installed instead of a microscope eyepiece and is connected to a personal computer via USB interface
- 1.3 megapixels, resolution 1280x1024 pixels
- Colour image output
- Compact and economic
- For installation on all mono-, bino-, trinocular microscopes with eyepiece diameter 23.2 and 30.5 mm
- Connection to PC via USB 2.0 interface
- Doesn't require any special adapters for installation in eyepiece tube

CAM V100 — video eyepiece camera


- Camera is installed instead of a microscope eyepiece and is connected to a monitor, a TV-set or a projector
- Colour image output
- Compact and economic
- For installation on all mono-, bino-, trinocular microscopes with eyepiece diameter 23.2 and 30.5 mm
- Connection to video monitor or projector via RCA input
- Doesn't require any special adapters for installation in eyepiece tube

Ordering information

Description	Code
Professional series	
CAM V2500 (C) Colour digital camera with extra high resolution 32 megapixels	10.2500.01
CAM V2400 (C) Colour digital camera for low-light microscopy with Peltier cooling element	10.2400.01
CAM V2400 (M) Monochrome digital camera for low-light microscopy with Peltier cooling element	10.2400.02
CAM V2200 (C) Colour digital camera with extra high sensitivity	10.2200.01
CAM V2200 (M) Monochrome digital camera with extra high sensitivity	10.2200.02
Practica series	
CAM V1400 (C) Colour digital camera for a wide range of applications in microscopy	10.1400.01
CAM V1400 (M) Monochrome digital camera for a wide range of applications in microscopy	10.1400.02
CAM V1200 (C) Colour digital camera for a wide range of applications in microscopy	10.1200.01
CAM V1200 (M) Monochrome digital camera for a wide range of applications in microscopy	10.1200.02
Economy series	
CAM V500 (C) Colour digital camera for bright field microscopy	10.0500.01
CAM V400 (C) Colour digital camera for bright field microscopy	10.0400.01
CAM V330 (C) Colour video camera for a wide range of applications in microscopy	10.0330.01
CAM V200 (C) Colour digital eyepiece camera	10.0200.01
CAM V100 (C) Colour video eyepiece camera	10.0100.01








Comparative characteristics

Professional series

Camera model	CAM V2500	CAM V2400	CAM V2200
			
Application	extra high resolution microscopy	low-light microscopy	extra high sensitivity microscopy
Megapixel	32.0, 16.0, 8.0, 2.0 M	1.4 M	1.4 M
Resolution	6464x4864, 4848x3648, 3232x2432, 1616x1216, 1280x1024, 808x608, 640x480	1392x1040	1392x1040
Sensor	1/1.8", CCD, step movement	2/3", CCD	2/3", CCD
Pixel size	4.4x4.4 µm	6.45x6.45 µm	6.45x6.45 µm
Output colour	colour	colour/monochrome	colour/monochrome
Frame rate	12 fps	15 fps	15 fps
Cooling type	—	Peltier	—
Exposure time	0.067 ms–2 seconds	3.5 µs–20 minutes	3.5 µs–60 seconds
Gain	1–10x	1–10x	1–10x
Binning	—	2x2, 3x3, 4x4	2x2, 3x3, 4x4
Connection interface	USB 2.0	USB 2.0	USB 2.0
Objective mount	C-mount	C-mount	C-mount
Housing	aluminium	aluminium	aluminium
Power supply	via USB port or external 5 V DC	via USB port or external 5 V DC	via USB port or external 5 V DC

Practica series

Economy series

CAM V1400	CAM V1200	CAM V500	CAM V400	CAM V330	CAM V200	CAM V100
						
wide applications microscopy	wide applications microscopy	bright field microscopy	bright field microscopy	wide application microscopy	education	education
2.0 M	1.4 M	1.5 M	1.3 M	—	1.3 M	—
1616x1216	1392x1040	1440x1080	1280x1024	480 TVL (S-Video), 450 TVL (RCA)	1280x1024	360 TVL
1/1.8", CCD	1/2", CCD	1/2.5", CMOS	1/2", CMOS	1/2", CCD	1/3", CMOS	1/3", CMOS
4.4x4.4 µm	4.65x4.65 µm	4.2x4.2 µm	5.2x5.2 µm	4.65x4.65 µm		
colour/ monochrome	colour/ monochrome	colour	colour	colour	colour	colour
12 fps	15 fps	10 fps	8 fps	24 fps	8 fps	24 fps
—	—	—	—	—	—	—
1/1000–16 seconds	1/1000–16 seconds	1/1000–3 seconds	1/1000–3 seconds	1/50, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000, 1/50–1/100000, 1/120–1/100000 seconds	1/1000–3 seconds	1/1000–3 seconds
1–10x	1–10x	1–3x	—	—	—	—
2x2, 4x4	2x2, 3x3, 4x4	—	—	—	—	—
USB 2.0	USB 2.0	USB 2.0	USB 2.0	S-Video, BNC	USB 2.0	RCA
C-mount	C-mount	C-mount	C-mount	C-mount	eyepiece 23.2, 30.5 mm	eyepiece 23.2, 30.5 mm
aluminium	aluminium	aluminium	plastic	aluminium	plastic	plastic
via USB port or external 5 V DC	via USB port or external 5 V DC	via USB port	via USB port	external 12 V DC	via USB port	external 9 V DC



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We reserve the right to change specification without notice.

Official distributor

Rev 3.0/09.2011 EN