JENOPTIK

ProgRes® Cameras

Perfect Digital Imaging

Optoelectronic Systems

Perfect Digital Imaging
A premium partner

The digital microscope cameras of the ProgRes® family are based on decades of experience in development and production of high-end solutions for digital imaging.

Jenoptik also offers its camera range as imaging modules for easy integration into a system solution requiring a reliable imaging component.

In addition to the standard product portfolio, Jenoptik also offers the development and production of customer-specific image processing systems based on extensive know-how in optics and precision mechanics and experience in various applications ensuring high levels of solution-oriented expertise for complex requirements in the field of digital processing.

Take your chance to ProgRes®

ProgRes® cameras are deployed in microscopy and macroscopy, in areas such as documentation, analysis and archiving, in life sciences, forensics, metallography and many other fields of material science. These cameras are suitable for all contrast methods in light microscopy and can be easily integrated into each laboratory – via C-Mount to any microscope and via USB 2.0/ FireWire interface to any PC or notebook. A broad range of camera types is available for various requirements ranging from fluorescence imaging in research or routine application to quality control in industry.

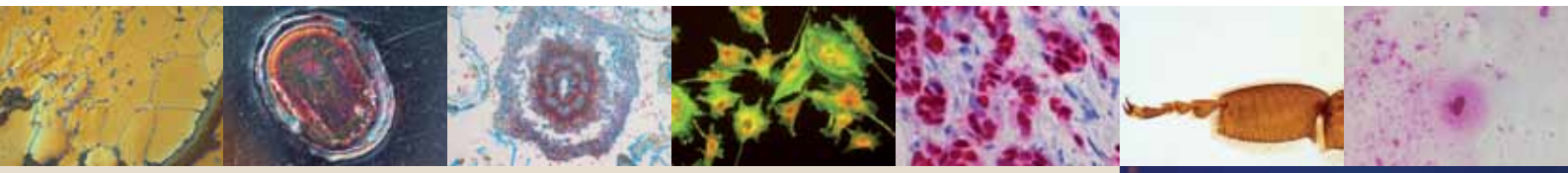
With a ProgRes® camera at hand you are ready to meet tomorrow's imaging challenges today!

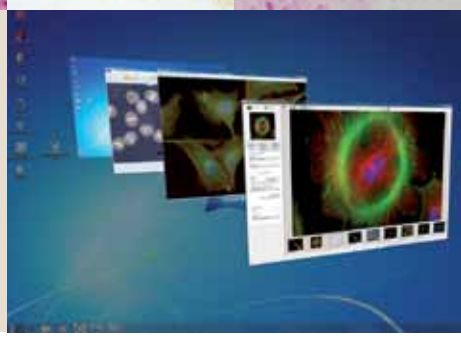
The exact reproduction of colors and display of the finest details thanks to the high resolutions of ProgRes® cameras make them an outstanding solution for demanding analysis and reliable documentation. High frame rates provide fast live images, thus offering easy workflow and convenient use. In addition to their superior image quality, the benefits of ProgRes® cameras are ease of installation as well as convenient operation and not least the excellent price-performance ratio.

ProgRes® CapturePro Software
Advance your image results

The powerful capture software ProgRes® CapturePro is included in the delivery of each ProgRes® camera free of charge.
Whether for simple image documentation or advanced image processing: with merely three mouse clicks you can optimize your images – thanks to the automatic functions included in ProgRes® CapturePro software.

CapturePro supports the excellent quality of ProgRes® microscope cameras and delivers optimal image quality and reproducible results.
Calibrations and image correction matrices, e.g. shadings, can be individually generated for your camera and are saved in your own user profile.





Straight-line workflow with ProgRes® CapturePro

Features
- Continuous automatic exposure control
- Automatic white balance
- Multi-focus (Z-Stacking)
- Multi-fluorescence mode
- Measurement capabilities
- Image annotations
- Time-lapse
- Shading calibrations
- Multi-camera operation
- Individual user profiles

Benefits
- Included free of charge
- Ease of use
- Full support of Multicore-processors
- Full WIN support for all cameras (even WIN 7, 32 and 64 Bit)
- MAC support for FireWire cameras
- Free software updates for registered users
- Stand-alone software and TWAIN Plug-In
- Optional software development kit (SDK)

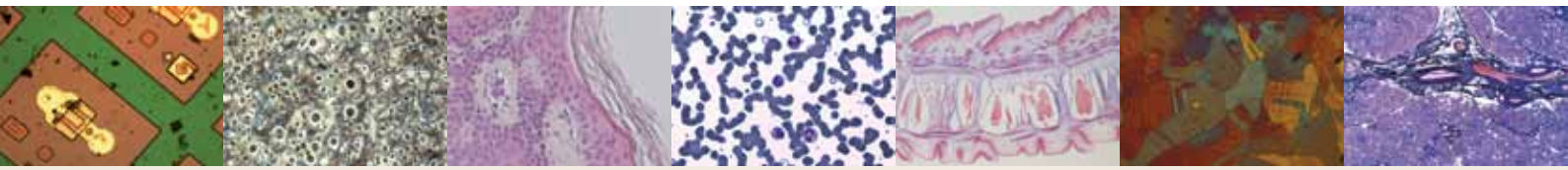
ProgRes® CMOS Cameras
Experience the highest performance

Designed to provide maximum versatility and cost-effectiveness, the digital microscope cameras of the ProgRes® CMOS range enable quick and precise setting of specimen and microscope.

The fast live images meet the requirements of professionals, and the outstanding CMOS technology and the high resolutions make these ProgRes® cameras the first choice imaging solution for usage in education institutes and training labs.

Benefits

- High frame rates
- Good color reproduction



Excellent color reproduction I Outstanding image quality I High resolution I C-Mount I

Specifications

ProgRes® camera type	CT3	CT3 USB	CT5 USB
Image sensor	1/2˝ CMOS 3.15 Mpix	1/2˝ CMOS 3.15 Mpix	1/2.5˝ CMOS 5 Mpix
Color/Monochrome	Color	Color	Color/Monochrome
Pixel size [W x H]	3.2 µm x 3.2 µm	3.2 µm x 3.2 µm	2.2 µm x 2.2 µm
Dynamic range	58 dB	58 dB	66 dB
Exposure times	50 µs ... 3 s	100 µs ... 3 s	150 µs ... 3 s
Max. live frame rate [image size in pixel]	10 fps [2048 x 1536] 26 fps [1024 x 768]	9 fps [2048 x 1536] 35 fps [1024 x 768]	5.5 fps [2592 x 1944] 17 fps [1296 x 972]
Cooling	no	no	no
Digital interface	FireWire a	USB 2.0	USB 2.0
Trigger In/Out	no	yes	yes
Voltage supply	FireWire powered	USB powered	USB powered
Dimensions [L x W x H]	89 mm x 84 mm x 93 mm		
Weight	approx. 700 g		

ProgRes® CCD Routine Cameras
Visualize exact colors

Excellent color reproduction and high resolution are the distinguishing features of the cameras of the ProgRes® CCD Routine range. Providing excellent digital images of the finest color gradings, they offer sophisticated use.

With up to 7 megapixel resolution, these cameras are ideal tools for high-quality image documentation and elementary image analysis. ProgRes® C3 and ProgRes® C5 are optionally available with cooling.

Benefits

- Perfect color reproduction
- Excellent image quality
- High resolution & fast live image

Available as imaging modules for system integrators I Free ProgRes® capture software for easy operation

Specifications

ProgRes® camera type	C3	C5	C7
Image sensor	1/1.8″ CCD 3.2 Mpix	2/3″ CCD 5.0 Mpix	1/2.5″ CCD 7.1 Mpix
Color/Monochrome	Color	Color	Color
Pixel size [W x H]	3.45 µm x 3.45 µm	3.4 µm x 3.4 µm	1.86 µm x 1.86 µm
Dynamic range	61 dB	61 dB | 60 dB	60 dB
Exposure times	270 µs ... 180 s	90 µs ... 180 s	170 µs ... 5 s
Max. live frame rate [image size in pixel]	6 fps [2080 x 1542] 12 fps [1040 x 770]	6 fps [2580 x 1944] 21 fps [646 x 488]	18 fps [1228 x 920]
Cooling	optional	optional	no
Digital interface	FireWire a		
Trigger In/Out	no	no	yes
Voltage supply	FireWire powered		
Dimensions [L x W x H]	89 mm x 84 mm x 93 mm		
Weight	approx. 700 g		

ProgRes® CCD *SpeedXT core* Cameras

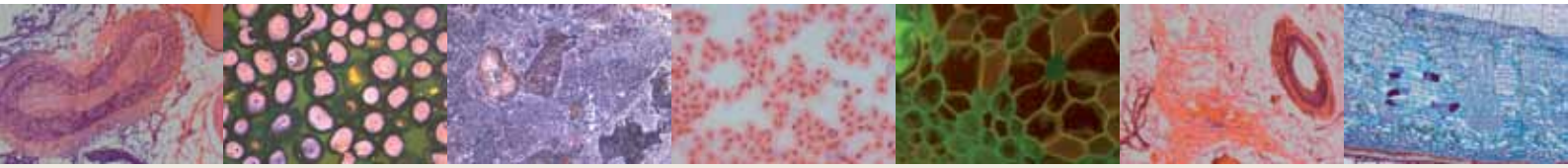
Breakthrough in CCD-Speed

Jenoptik's innovative *SpeedXT core* technology provides an improvement in live image speed of high-resolution CCD cameras. The user is enabled to facilitate precise focusing and very easy positioning of specimens without interlace effects – a clear advantage in the analysis of moving objects and for optimal task management in laboratories. Easy connection and data transfer is ensured by USB 2.0 interface.

Brilliant images in proven Jenoptik CCD quality with superior color reproduction can be achieved immediately through an overall faster workflow.

Benefits

- Outstanding live image speed
- Excellent image quality & high resolution
- Perfect color reproduction



I Analogue gain I Safe investment I Excellent price-performance ratio I Fast live image I Full WIN 7

Specifications

ProgRes® camera type	***SpeedXT core 3***	***SpeedXT core 5***
Image sensor	1/1.8'' CCD 3.2 Mpix	2/3'' CCD 5.0 Mpix
Color/Monochrome	Color	Color
Pixel size [W x H]	3.45 µm x 3.45 µm	3.4 µm x 3.4 µm
Dynamic range	61 dB	61 dB
Exposure times	30 µs ... 180 s	30 µs ... 180 s
Max. live frame rate [image size in pixel]	17 fps [2080 x 1542] 30 fps [1040 x 770]	13 fps [2580 x 1944] 45 fps [640 x 484]
Cooling	no	no
Digital interface	USB 2.0, USB 3.0 conform	
Trigger In/Out	no	
Voltage supply	USB powered	
Dimensions [L x W x H]	89 mm x 84 mm x 93 mm	
Weight	approx. 700 g	

ProgRes® CCD Research Cameras

Discover optimal image quality

All color and monochrome cameras of the ProgRes® CCD Research camera range have been optimized for applications in exacting tasks. Especially when working with low-light specimens, the high sensitivity of these models produces brilliant images.

Expeditious and smooth operation is provided by sensitive CCD sensors, optionally available with cooling, offering high frame rates and a broad dynamic range.

The sophisticated microscanning technology provided in the scanning ProgRes® cameras allows for capturing images of up to 12.5 megapixel, even in true color.

Benefits

- Perfect color reproduction
- Outstanding image quality
- Highest resolution & fast live image
- High sensitivity & low noise

support I USB / FireWire I Ease of installation I Free software updates for registered users

Specifications

ProgRes® camera type	CF/MF	CF/MF USB	CF^{cool}/MF^{cool}	CF^{scan}/MF^{scan}/C14^{plus}
Image sensor	2/3˝ CCD 1.4 Mpix progressive scan	2/3˝ CCD 1.4 Mpix progressive scan	2/3˝ CCD 1.4 Mpix progressive scan	2/3˝ CCD 1.4 Mpix progressive scan [up to 12.5 Mpix]
Color/Monochrome	Color/Monochrome	Color/Monochrome	Color/Monochrome	Color/Monochrome
Pixel size [W x H]	6.45 µm x 6.45 µm	6.45 µm x 6.45 µm	6.45 µm x 6.45 µm	6.45 µm x 6.45 µm
Dynamic range	65 ... 67 dB	65 ... 67 dB	67 ... 69 dB	67 ... 69 dB
Exposure times	94 µs ... 180 s	20 µs ... 180 s	94 µs ... 300 s	94 µs ... 300 s ... 600 s [C14^{plus}]
Max. live frame rate [image size in pixel]	13 fps [1360 x 1024] 51 fps [680 x 512]*	15 fps [1360 x 1024] 26.5 fps [680 x 512]	13 fps [1360 x 1024] 51 fps [680 x 512]*	13 fps [1360 x 1024] 51 fps [680 x 512]*
Cooling	no	no	yes	yes
Digital interface	FireWire a	USB 2.0	FireWire a	FireWire a
Trigger In/Out	yes			
Voltage supply	FireWire powered	USB powered	FireWire powered	FireWire powered
Dimensions [L x W x H]	89 mm x 84 mm x 93 mm [USB] / 145 mm x 93 mm x 123 mm [FireWire]			
Weight	approx. 800 g	approx. 700 g	approx. 800 g	approx. 800 g

* HFRM = High Frame Readout Mode

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