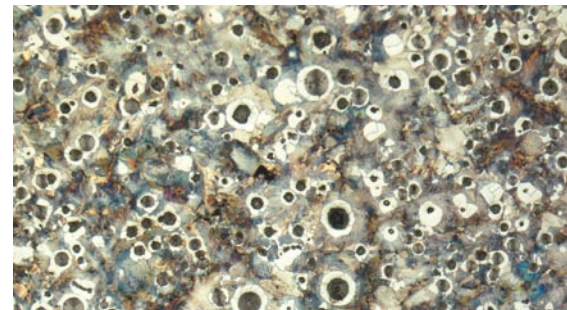
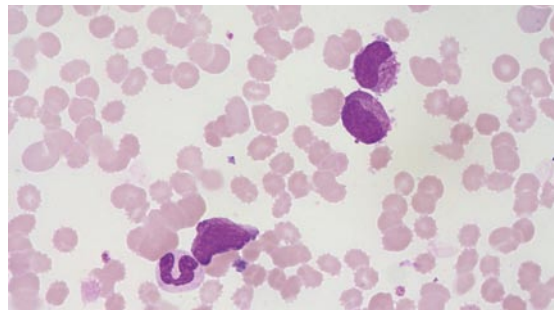




ProgRes[®] CMOS Cameras

Experience the high performance



Fast live image

Designed to provide highest versatility and cost-effectiveness, the cameras of the ProgRes[®] CMOS range allow for quick and precise setting of specimen and microscope, and hence provide comfortable operation. Fast live images meet the requirements of professionals, and the outstanding CMOS technology makes these ProgRes[®] cameras the first choice imaging solution for usage in education institutes and training labs.

High speed and high resolution

The new generation of ProgRes[®] CMOS based USB 2.0 and FireWire cameras offers rapid image refresh rates of up to 90 fps@VGA. Resolutions from 1 up to 5 mega pixels allow for optimal performance in low as well as high magnifications.

Due to the large pixel size of 5.2 μm^2 the ProgRes[®] CT1 delivers high frame rates of 30 fps in full resolution and offers high sensitivity for best image quality.

Benefits

- High frame rates
- Good color reproduction
- Free ProgRes[®] capture software for easy operation
- Fit to any PC and microscope
- Safe investment
- Excellent price-performance ratio

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Experience the high performance

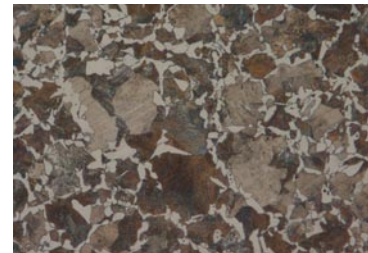
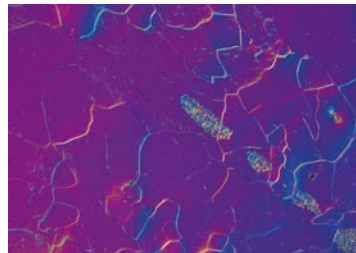
Specifications

ProgRes® camera type	CT1 USB	CT3 CT3 USB	CT5 USB
Image sensor	1/2" CMOS	1/2" CMOS	1/2.5" CMOS
Color / Monochrome	Color / Monochrome	Color	Color / Monochrome
Sensor resolution [max]	1280 x 1024 pixel [1.3 Mpix]	2048 x 1536 pixel [3.15 Mpix]	2592 x 1944 pixel [5.0 Mpix]
Active sensor size [H x V]	6.66 mm x 5.32 mm	6.55 mm x 4.92 mm	5.70 mm x 4.28 mm
Pixel size	5.2 µm ²	3.2 µm ²	2.2 µm ²
A / D conversion	10 bit	10 bit	12 bit
Pixel clock	48 MHz	36 MHz 48 MHz ¹⁾	48 MHz
Dynamic range	68 dB	58 dB	66 dB
Exposure times	60 µs ... 0.5 s	50 µs ... 3 s 100 µs ... 3 s ¹⁾	150 µs ... 3 s
Analog gain	1x ... 5x (SDK)	1x ... 20x 1x ... 4x ¹⁾ (SDK)	1x ... 5x (SDK)
Max. frame rate [image size]	21 fps [1280 x 1024 pixel] 89 fps [640 x 480 pixel]	10 fps [2048 x 1536 pixel] 26 fps [1024 x 768 pixel] 9 fps [2048 x 1536 pixel] ¹⁾ 35 fps [1024 x 768 pixel] ¹⁾	5.5 fps [2592 x 1944 pixel] 17 fps [1296 x 972 pixel]
Image resolution	Binning: no	2x, 3x	2x, 4x
Cooling	no	no	no
Digital interface	USB 2.0	FireWire a USB 2.0 ¹⁾	USB 2.0
Optical connection	C-Mount (0.5x or 0.63x TV pref., depends from the type of microscope)		C-Mount (0.5x TV pref.)
Trigger In / Out	yes	no yes ¹⁾	yes
Voltage supply	USB powered	FireWire USB ¹⁾ powered	USB powered
Power consumption	approx. 1.6 W	approx. 2.5 W 2 W ¹⁾	approx. 1.8 W
Ambient conditions	Temperature: +5 °C ... +55 °C / Humidity: 5 % ... 80 %, non condensing		
Storage conditions	Temperature: -20 °C ... +70 °C		
Dimensions (L x W x H)	89 mm x 84 mm x 93 mm		
Weight	approx. 700 g		
Application software	ProgRes® CapturePro for PC (TWIN only for PC) / MAC support only for Firewire cameras		
SDK	ProgRes® SDK for PC for all cameras / MAC & Linux support only for Firewire cameras		
External camera driver	available at: www.jenoptik.com/progres		
Hardware requirements	PC: MS WIN XP/ Vista /WIN 7 Mac: OS X 10.4 or higher 3 GHz CPU, 1 GB RAM, 256 MB graphics, FireWire a or USB 2.0, Multicore recommended		
¹⁾ Specification only for CT3 USB			

Fields of Application

Image analysis, documentation and archiving in micro- and macroscopy in the fields of:

- Material science, geology & mineralogy
- Life science, diagnostics
- Quality control
- Education and teaching



It is our policy to constantly improve the design and specifications. Accordingly, the details represented herein cannot be regarded as final and binding.



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