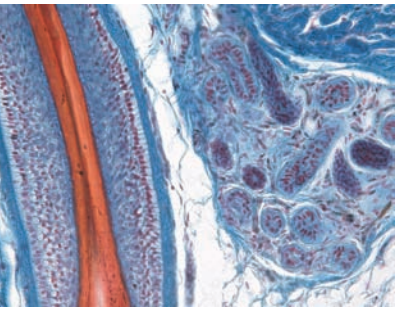
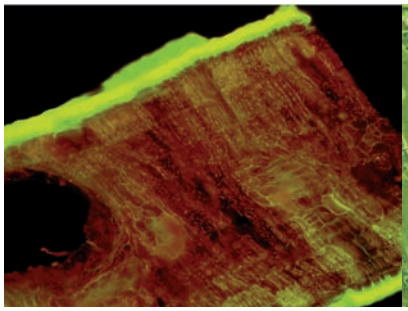
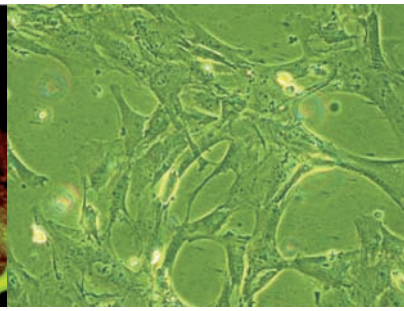
JENOPTIK
GERMANY

ProgRes® CF Series

Fast Research Grade Cameras with High Resolution







Highest Image Quality in Color

All cameras of the ProgRes® CF series have been optimized for applications in exacting routine and research tasks. Expeditious and smooth operation is provided by a sensitive 1.4 megapixel CCD sensor with high frame rates and a broad dynamic range.
Low-light contrast methods involve stringent requirements which are met by the two camera models CF*cool* and CF*scan* through analog gain and active sensor cooling.

Precision to the Detail

Where smallest structures have to be reproduced in full detail, the CF*scan* model with 12.5 megapixel capability provides excellent resolution for informative image documentation and image analysis. In addition, the Microscanning technology of CF*scan* allows capturing overview images and high-resolution detail images - with identical setting of the microscope's optics.

Fits Easily into Any Laboratory

With IEEE1394 Firewire and C-Mount each camera easily connects to any computer and microscope. Delivery includes ProgRes® CapturePro image acquisition software with comprehensive functionality designed for intuitive handling. The ProgRes® camera control has already been directly integrated into many image analysis software packages.
Of course, ProgRes® CF models are suitable for all contrast methods in light microscopy.

Benefits

- Fast frame rates
- Excellent color reproduction
- Very high image resolution and sensitivity
- Easy operation with comprehensive functionality
- Safe investment

Excellence through light: Sensors

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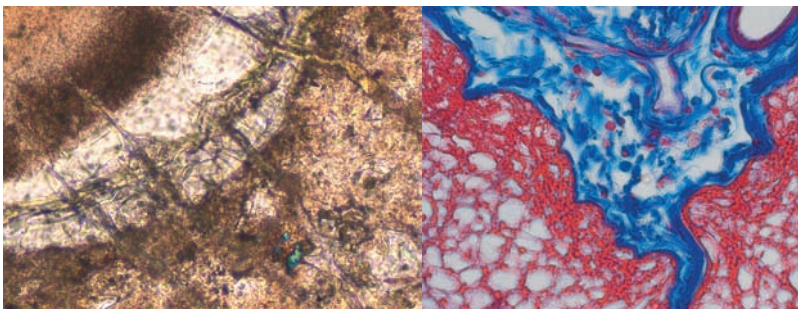
Specifications

	ProgRes® CF	ProgRes® CF *cool*	ProgRes® CF *scan*
CCD sensor	2/3" 1.4 Megapixel Progressive Scan Color CCD, 8.8 mm × 6.6 mm active area		
Sensor resolution	1360 × 1024 pixel	1360 × 1024 pixel	1360 × 1024 pixel
Pixel size	6.45 µm × 6.45 µm	6.45 µm × 6.45 µm	6.45 µm × 6.45 µm
A/D conversion	3 × 12 Bit RGB	3 × 14 Bit RGB	3 × 14 Bit RGB
Pixel clock	12 MHz | 24.5 MHz	12 MHz | 24.5 MHz	12 MHz | 24.5 MHz
Dynamic range (at 10 ms exposure)	67 dB | 65 dB	69 dB | 67 dB	69 dB | 67 dB
Max. exposure	180 s	300 s	300 s
Analog gain	1× ... 8×	1× ... 8×	1× ... 8×
Frame rate (image size)	31 fps (680 × 512)	31 fps (680 × 512)	31 fps (680 × 512)
Image resolution Standard:	1360 × 1024	1360 × 1024	1360 × 1024
HFRM:	680 × 512 and 340 × 256	680 × 512 and 340 × 256	680 × 512 and 340 × 256
Binning:	453 × 340 and 272 × 204	453 × 340 and 272 × 204	453 × 340 and 272 × 204
Microscanning:	-	-	4080 × 3072
	-	-	2720 × 2048
Cooling	-	Peltier, fan, hermetically sealed sensor	
Digital interface	IEEE1394a Firewire		
Optical connection	C-Mount (0.63× TV adapter recommended)		
Trigger	Trigger-In and Trigger-Out for synchronization with external devices		
Tripod thread	Dual thread 3/8" and 1/4"		
Voltage supply	8 ... 33 VDC (via IEEE1394 connector)		
Power consumption	5 W	8 W	8 W
Ambient conditions	Temperature: +5 °C ... +35 °C Humidity: 5 % ... 80 %, not condensing		
Dimensions (L × W × H)	145 mm × 93 mm × 123 mm		
Weight	800 g		
Capture software	ProgRes® CapturePro (TWAIN & Stand-Alone)		
Computer requirements	PC: Microsoft Windows 2000/XP/Vista | Mac: Apple Macintosh OS X 10.4 or higher 3 GHz CPU, 1 GB RAM, 64 MB graphics recommended, IEEE1394 Firewire (OHCI compliant)		

Fields of Application

- Genetics
- Microbiology
- Pathology
- Cell biology
- Pharmacy
- Life Science
- Material science
- Metallography
- Mineralogy
- Chemistry
- Macrophotography
- Forensics



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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