PROMICAM PRO 3-16CP

16 MP Color CMOS USB 3 High Performance Digital Camera for a Wide Range of Applications

High Image Quality, Excellent Color Reproduction and Large Field of View

16 MP sensor with 1.1" diagonal provides high image quality, excellent color reproduction and large field of view.

Global Shutter

The sensor uses global shutter, which enables observation of fast-moving objects without image distortion.

High Live View Frame Rates Suitable for "Live Imaging" Applications

Modern USB 3.1 Gen 1 interface provides high live view frame rates, while CPU load remains low. Live view in full 16 MP resolution can be displayed with frame rate up to 23 fps, in 4K UHD (3840 x 2160 - using ROI feature) live view can be displayed with frame rate up to 36 fps.

High Sensitivity, High Dynamic Range and Low Noise Level

The used SONY® Pregius S CMOS sensor brings high sensitivity, high dynamic range and very low noise level. Those parameters make the camera suitable also for low-light applications like darkfield or moderate light fluorescence.

Support in QuickPHOTO Programs

QuickPHOTO programs for digital photomicrography provide full control of camera's features, e. g.: live view display, manual and automatic exposure, white balance, black balance, gain, gamma, hue, shading correction, measurements in a live view and many more.

PROMICAM PRO 3-16CP camera is also supported by following extension SW modules for QuickPHOTO:

- **Deep Focus** EDF module
- Live stitching using **Image Stitching** module
- Automated HDR image acquisition using **HDR** module
- Real-time video recording using **RECORD IT** module

Main Features:

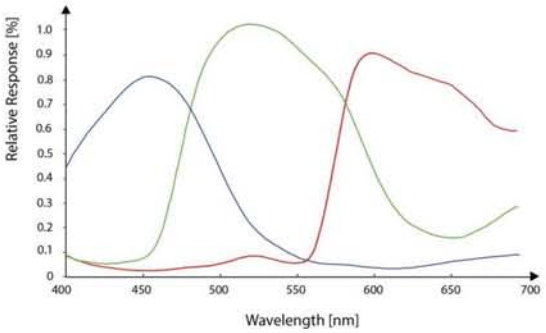
- 1.1" SONY® Pregius S CMOS color sensor
- 16 MP sensor resolution
- High image quality
- Large field of view
- Excellent color reproduction
- Exposure time up to 4 s
- Global shutter
- High sensitivity, high dynamic range, low noise level
- Live view frame rate up to 23 fps in full 16 MP resolution
- USB 3.0 / USB 3.1 Gen 1 interface
- Screw lock USB connector
- Supported by QuickPHOTO programs

Suitable for Applications:

- Brightfield/Darkfield
- DIC
- Biology/Live Cell Imaging
- Moderate Light Fluorescence
- Gel Documentation
- Histology/Pathology/Cytology
- Metrology/Mineralogy/ Metallurgy/Geology
- Quality Control/Semiconductor Inspection
- Documentation and Archiving
- Education

Sensor Specifications	
Sensor Type	Sony® Pregius S CMOS, color, global shutter
Sensor Size	1.1" (14.58 x 8.31 mm)
Sensor Aspect Ratio	16:9
Pixel Size	2.74 x 2.74 µm
Resolution	5320 x 3032 pixels (16 MP)
Supported Software	
Software	QuickPHOTO in version 3.2 or higher (not included)
Camera Specification (when used with QuickPHOTO programs)	
Image Resolution	5320 x 3032, 3840 x 2160 (4K UHD), 2656 x 1512, 1920 x 1080 (Full HD), 1328 x 756 pixels
Live View Resolution@Max. Frame Rate (fps)	5320 x 3032@23 fps 3840 x 2160 (4K UHD - ROI)@36 2656 x 1512 (subsampling)@51fps 1920 x 1080 (Full-HD - ROI)@51 fps 1328 x 756 (subsampling) @51 fps
Lower Resolutions	Subsampling, ROI
Exposure Times	1/67000 s (15 µs) - 4 s
Gain	1 – 251x
Exposure Mode	Automatic, automatic-interactive, fluorescence (SFL Auto), manual
White Balance	Automatic, automatic-regional, manual
Black Balance	Automatic-regional, manual
Camera Characteristics	
Interface	USB 3.0 / USB 3.1 Gen 1
USB connector	USB-C screw lock
Mount	C-mount
Dimensions	60 x 29 x 44 mm
Weight	110 g
Tripod Mount	1/4" - 20
Recommended Microscope Coupler	0.63x or 1x C-mount
Compliances	CE certified, RoHS, WEEE, FCC
Included in the Box	PROMICAM PRO 3-16CP camera, 3m USB 3.0 cable with lock screw connector
Minimal System Requirements	
Processor	Intel® Core™ i3 / AMD RYZEN™ 3
RAM	2 GB
USB port	1x USB 3.0 port
Operating System	Microsoft® Windows® 7/8/8.1/10/11 (32bit or 64bit)
Recommended Computer Configuration	
Processor	Intel® Core™ i5 / AMD RYZEN™ 5 or better
RAM	8 GB or more
USB port	1x USB 3.0 port
Operating System	Microsoft® Windows® 10/11 (64bit)

Spectral Sensitivity:



Sample Images: