

PROMICAM 3-2CP

2.3 MP color USB 3.0 digital camera with
SONY® Pregius CMOS sensor with global shutter
and large field suitable also for fluorescence applications



New Generation of CMOS Sensor Exceeds CCD Technology

PROMICAM 3-2CP USB 3.0 camera represents a viable alternative to CCD cameras. SONY® Pregius CMOS sensor technology exceeds CCD technology in several parameters.

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

Sensor with 1/1.2" 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 3.0 interface provides high live view frame rates, while CPU load remains low. Live view in full 2.3 MP resolution can be displayed with frame rate up to 41 fps. Live view in Full HD (1920 x 1080 - using ROI feature) can be displayed with frame rate up to 46 fps.

High Sensitivity, High Dynamic Range and Low Noise Level

The used SONY® Pregius CMOS sensor brings high sensitivity comparable to sensitivity of common CCD sensors. The values of dynamic range and noise level exceed the values of common CCD sensors.

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.

Main Features:

- SONY® Pregius CMOS sensor with 1/1.2" diagonal
- 2.3 MP sensor resolution
- High image quality
- Very large field of view
- Excellent color reproduction
- Exposure time up to 3.9 s
- Global shutter
- High sensitivity, high dynamic range, low noise level
- Live view frame rate up to 41 fps in full 2.3 MP resolution
- USB 3.0 / USB 3.1 Gen 1 interface
- Screw lock USB connector
- Supported by QuickPHOTO programs

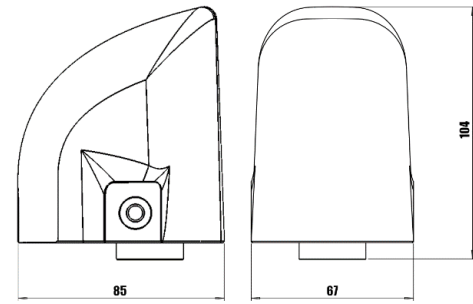
Suitable for Applications:

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

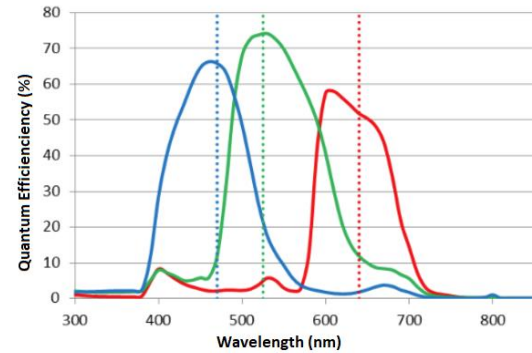


Sensor Specifications	
Sensor Type	Sony® Pregius CMOS with global shutter, color
Sensor Size	1/1.2" (11.25 x 7.03 mm)
Sensor Aspect Ratio	16:10 (8:5)
Pixel Size	5.86 x 5.86 µm
Resolution	1920 x 1200 pixels (2.3 MP)
Supported Software	
Software	QuickPHOTO in version 3.0 or higher (not included)
Camera Specification (when used with QuickPHOTO programs)	
Image Resolution	1920 x 1200, 1920 x 1080 (Full HD), 960 x 600 pixels
Live View Resolution@Max. Frame Rate (fps)	1920 x 1200@41 fps 1920 x 1080 (Full HD - ROI)@46 fps 960 x 600 (binning)@41 fps
Lower Resolutions	Binning 2x2, ROI
Exposure Times	1/52000 s (19 µs) to 3.9 s
Gain	1x to 31x
Exposure Mode	Automatic, automatic-interactive, fluorescence (SFL Auto), manual
White Balance	Automatic, automatic-regional, manual
Black Balance	Automatic-regional, manual
Camera Characteristics	
Dynamic Range	67.33 dB
Saturation Capacity	33158 e-
Quantum Efficiency (green color 525 nm)	74 %
Read Noise	13.77 e-
Max. Signal to Noise Ratio	45.09 dB
Interface	USB 3.0 /USB 3.1 Gen 1 (backwards compatible with USB 2.0)
USB connector	Micro B screw lock
Mount	C-mount
Dimensions	67 x 85 x 104 mm
Weight	385 g
Tripod Mount	1/4" - 20 (under cap on both sides)
Recommended Microscope Coupler	1x
Compliances	CE certified, RoHS, WEEE
Included in the Box	PROMICAM 3-2CP camera, 3m USB 3.0 cable with lock screw connector, USB 3.0 interface card
Minimal System Requirements	
Processor	Intel® Core™ i3 / AMD RYZEN™ 3
RAM	2 GB
Slot for USB 3.0 Interface Card (for older computers)	1x PCI EXPRESS 2.0 for desktop computers or 1x ExpressCard for laptops
Operating System	Microsoft® Windows® 7/8/8.1/10 (32bit or 64bit)
Recommended Computer Configuration	
Processor	Intel® Core™ i5 / AMD RYZEN™ 5 or better
RAM	4 GB
Slot for USB 3.0 Interface Card (for older computers)	1x PCI EXPRESS 2.0 for desktop computers or 1x ExpressCard for laptops
Operating System	Microsoft® Windows® 7/8/8.1/10 (64bit)

Dimensions (mm):



Quantum Efficiency:



Sample Images:

