

HDMI CAMERAS



XCAM1080PX Series C-mount HDMI+USB Output CMOS Camera



The XCAM1080PX series Camera is the next-generation live-view imaging-system with 1080P resolution(Video) at 60/30 FPS. It comes with Sony Exmor CMOS sensor with high sensitivity, low dark current and no smear achieved through the adoption of R, G and B primary color mosaic filters. The Camera uses a standard C-mount interface for maximum compatibility with various microscopy-systems. It can be used as a stand-alone recorder when used with an HDMI monitor or television, or live-streamed to a PC via USB for image-capture and video-recording. Hardware 3D denoising, sharpness and tone mapping control functions greatly improve the image and video quality. The included Windows software offers image-development and measurement tools, as well as advanced compositing features such as image-stitching and extended-depth-of-focus. With the ability to calibrate scales at multiple magnifications, the software can be used for multi-level inspection. For Mac and Linux, there is a lite version of the software which can capture video and still images, and includes limited processing features. The XCAM1080PX series Camera is intended to be used for the acquisition of digital images from the stereo microscope, biological microscope or online interactive teaching.

- Sony Starvis back illuminated CMOS sensor
- FHD HDMI video outputs
- SD card for the captured image and video storage
- Embedded XCamView for the control of the camera
- With strong ISP and other related processing functions

Related Models

Order Code	Sensor & Size(mm)	Pixel(μm)	G Sensitivity Dark Signal	FPS/Resolution	Binning	Exposure
XCAM1080P2MPA	Sony IMX385(C) 1/2"(7.2x4.05)	3.75x3.75	1175mv with 1/30s 0.15mv with 1/30s	60@1920*1080(HDMI) 50@1920*1080(USB)	1x1	0.04~1000
XCAM1080P8MPB	Sony IMX415(C) 1/2.8"(5.57x3.13)	1.45x1.45	300mv with 1/30s 0.13mv with 1/30s	30@1920*1080(HDMI) 30@3840*2160(USB)	1x1	0.04~1000

Camera interface and appearance dimensions



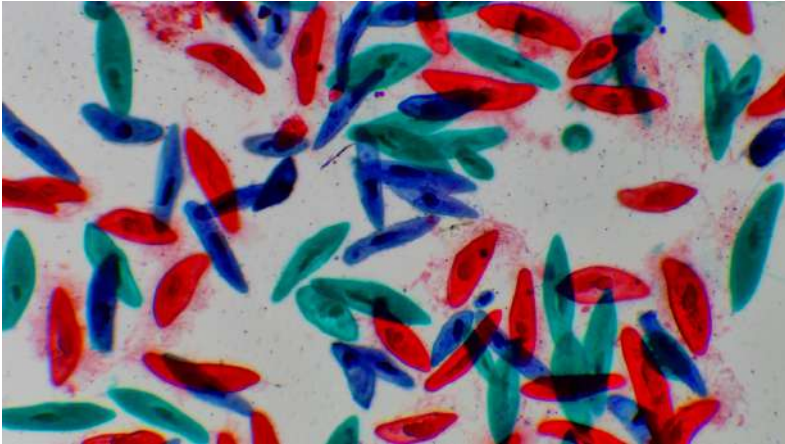
Specification

Interface	Function Description
USB Mouse	Connect USB mouse for easy operation with embedded XCamView software;
USB Video	Connect PC or other host device to realize video image transmission;
HDMI	Comply with HDMI1.4 standard. 1080P format video output for standard displayer;
USB	Connect USB flash drive for capturing video and image storage;
SD	Comply with SDIO3.0 standard and SD card could be inserted for video and images storage;
LED	LED status indicator;
DC12V	Power adapter connection (12V/1A);
ON/OFF	Power switch;
Video Output Interface	Function Description
HDMI Interface	Comply with HDMI1.4 standard; 60fps@1080P;
USB Video Interface	Connecting USB port of PC for video transfer ; MJPEG format video;
Function Name	Function Description
Video Saving	Video format : 1920*1080 H264/H265 encoded MP4 file; Video saving frame rate : 60fps(XCAM1080P2MPA/XCAM1080P8MPA(Suspended)); 30fps(XCAM1080P8MPB)
Image Capture	2M (1920*2160, XCAM1080P2MPA) JPEG/TIFF image in SD card ; 8M (3840*2160, XCAM1080P8MPA/XCAM1080P8MPB) JPEG/TIFF image in SD card ;
Measurement Saving	Measurement information saved in layer mode with image content; Measurement information is saved together with image content in burn in mode.
ISP Function	Exposure(Automatic / Manual Exposure) / Gain, White Balance(Manual / Automatic / ROI Mode), Sharpening, 3D Denoise, Saturation Adjustment, Contrast Adjustment , Brightness Adjustment, Gamma Adjustment, Color to Gray, 50HZ/60HZ Anti-flicker Function
Image Operations	Zoom In/Zoom Out, Mirror/Flip, Freeze, Cross Line, Overlay, Embedded Files Browser, Video Playback, Measurement Function
Embedded RTC(Optional)	To support accurate time on board
Restore Factory Settings	Restore Camera parameters to its factory status
Multiple Language Support	English / Simplified Chinese / Traditional Chinese / Korean / Thai / French / German / Japanese / Italian
Software Environment under USB Video Output	
White Balance	Auto White Balance
Color Technique	Ultra-Fine Color Engine
Capture/Control SDK	Windows/Linux/macOS/Android Multiple Platform SDK(Native C/C++, C#/VB.NET, Python, Java, DirectShow, Twain, etc)
Recording System	Still Picture or Movie
Operating System	Microsoft ® Windows ® XP / Vista / 7 / 8 / 8.1 /10(32 & 64 bit) OSx(Mac OS X) Linux
PC Requirements	CPU: Equal to Intel Core2 2.8GHz or Higher
	Memory: 4GB or More
	Ethernet Port: RJ45 Ethernet Port
	Display:19" or Larger
	CD-ROM

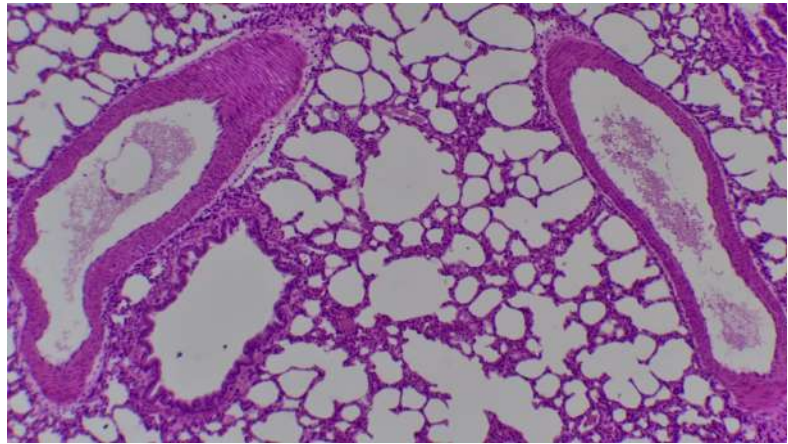
Operating Environment

Operating Temperature (in Centidegree)	-10°~ 50°
Storage Temperature (in Centidegree)	-20°~ 60°
Operating Humidity	30~80%RH
Storage Humidity	10~60%RH
Power Supply	DC 12V/1A Adapter

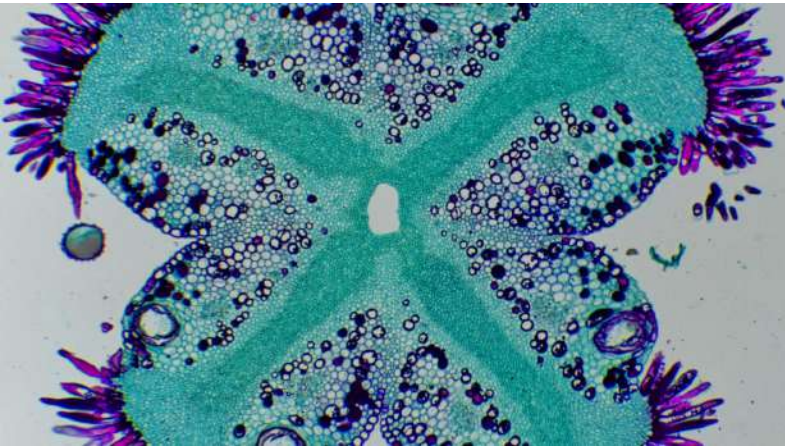
Instance



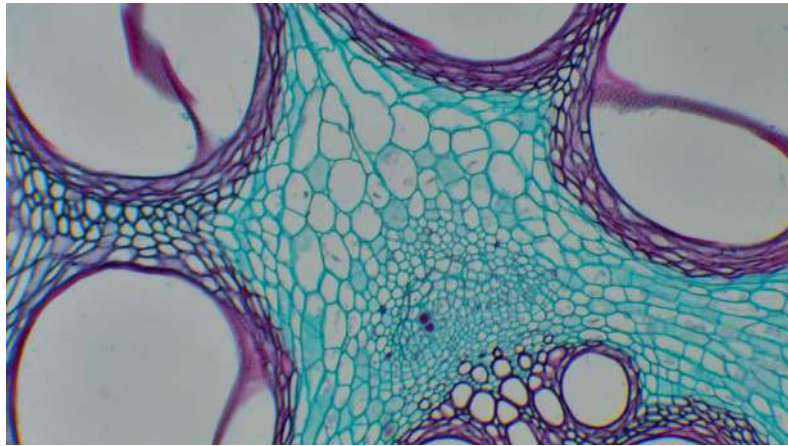
Paramecium slide preparation



Lung section



Transverse section of cotton stigma



Transverse section of pumpkin stem

Packing List



Packing Information of XCAM1080PX Series

Standard Packing List			
A	Gift box: L:25.5cm W:17.0cm H:9.0cm (1pcs,1.47kg/ box)		
B	One XCAM1080PX series camera		
C	Power Adapter: Input: AC 100~240V 50Hz/60Hz, Output: DC 12V 1A European standard: Model:GS12E12-P1I 12W/12V/1A; TUV(GS)/CB/CE/ROHS American standard: Model: GS12U12-P1I 12W/12V/1A: UL/CUL/BSMI/CB/FCC EMI Standard:EN55022,EN61204-3, EN61000-3-2,-3, FCC Part 152 class B, BSMI CNS14338 EMS Standard:EN61000-4-2,3,4,5,6,8,11,EN61204-3,Class A Light Industry Standard		
D	USB Mouse		
E	HDMI cable		
F	USB2.0 A male to A male gold-plated connectors cable /2.0m		
G	CD (Driver & utilities software, Ø12cm)		
Optional Accessory			
H	SD card(16G or above; Speed: class 10)		
I	Adjustable lens adapter	C-Mount to Dia.23.2mm eyepiece tube (Please choose 1 of them for your microscope)	108001/AMA037 108002/AMA050 108003/AMA075
J	Fixed lens adapter	C-Mount to Dia.23.2mm eyepiece tube (Please choose 1 of them for your microscope)	108005/FMA037 108006/FMA050 108007/FMA075
	Note: For K and L optional items, please specify your Camera type(C-mount, microscope Camera or telescope camera), engineer will help you to determine the right microscope or telescope camera adapter for your application;		
K	108015(Dia.23.2mm to 30.0mm ring)/Adapter rings for 30mm eyepiece tube		
L	108016(Dia.23.2mm to 30.5mm ring)/ Adapter rings for 30.5mm eyepiece tube		
M	Calibration kit	106011/TS-M1(X=0.01mm/100Div.); 106012/TS-M2(X,Y=0.01mm/100Div.); 106013/TS-M7(X=0.01mm/100Div., 0.10mm/100Div.)	