

Touptek Microscope - USB-Camera XFCAM-1080PHB/PHD HDMI + USB 2.0 + SD-Karte data transfer

XFCAM1080PHB/PHD is a multiple interfaces (HDMI+WiFi+SD card, so X here means multiple interfaces) CMOS camera with autofocus function (F means autofocus) and it adopts ultra-high performance Sony CMOS sensor as the imagepicking device. HDMI+WiFi are used as the data transfer interface to HDMI display or computer.

For HDMI output, The XCamView will be loaded and a camera control panel and toolbar are overlaid on the HDMI screen, in this case, the USB mouse can be used to set the camera, browse and compare the captured image, play the video etc.

For WiFi output, unplug the mouse and plug in the USB WiFi adapter, connect the computer WiFi to the camera, then the video stream can be transfer to computer with the advanced software ToupView. With ToupView, you can control the camera, process the image as ToupTek's other USB series camera. In HDMI and WiFi outputs, the camera embedded Auto/Manual Focus function can obtain the clear image at ease. No hand rotation of the microscope Coarse/Fine knob is needed..



The XFCAM1080PHB/PHD's basic characteristic is as follows:

- All in 1(HDMI+WiFi) C-mount camera with Sony high sensitivity CMOS sensor;
- 1920 × 1080 (1080P) video resolution;
- Record 1080P video(ASF format) into SD card;
- 5~2M resolution captured image(XFCAM1080PHB/PHD);
- HDMI/WiFi output simultaneously;
- Auto/Manual focus with the movement of the sensor;
- For HDMI output, XCamView is used to control the camera;
- For WiFi output, ToupView/ToupLite is used to control the camera;
- Ultra-Fine Color Engine with perfect color reproduction capability(WiFi);
- With advanced video & image processing application ToupView/ToupLite;
- Windows/Linux/macOS/Android multi-platform SDK;
- CNC Camera housing;

The possible applications of XFCAM1080PHB/PHD are as follows:

- Scientific research, education (teaching, demonstration and academic exchanges);
- Digital laboratory, medical research;
- Industrial visual (PCB examination, IC quality control);
- Medical treatment (pathological observation);
- Food (microbial colony observation and counting);
- Aerospace, military (high sophisticated weapons);

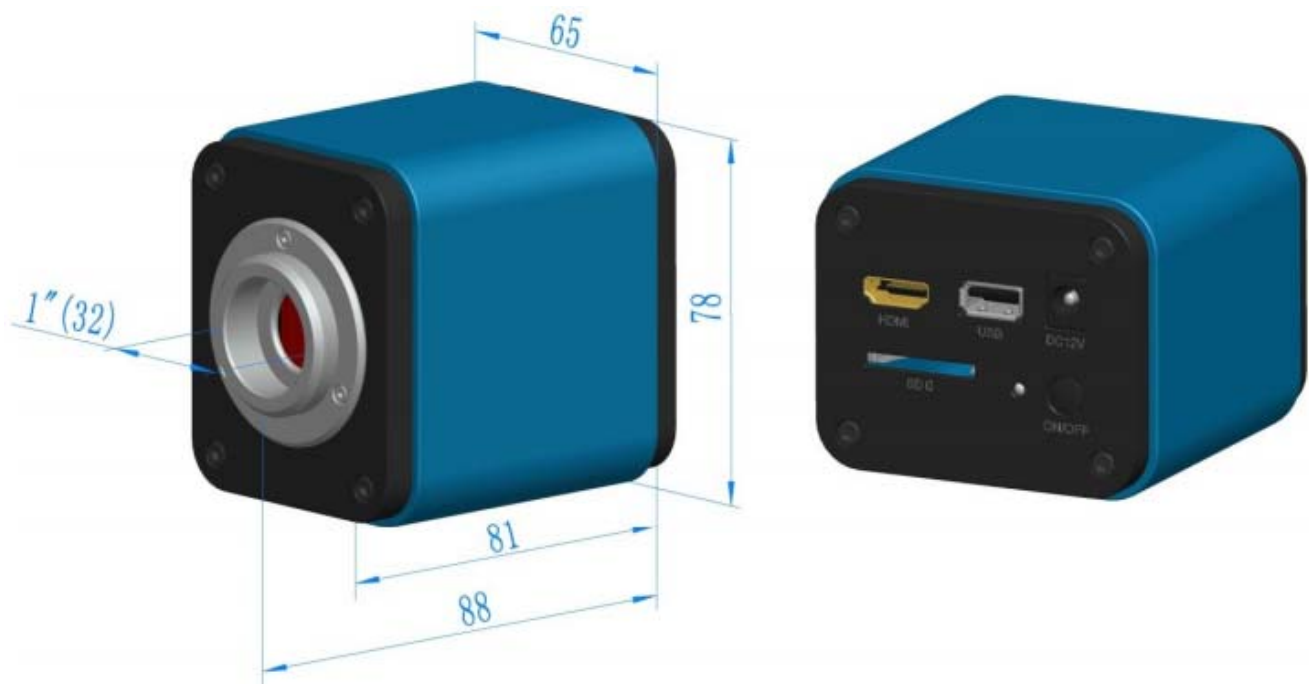


Order Code	Sensor & Size(mm)	Pixel(μm)	G Sensitivity Dark Signal	FPS/Resolution	Binning	Exposure
XFCAM1080PHB XF1080B	1080P/5M/Sony IMX178(C) 1/1.8"(6.22x4.67)	2.4x2.4	425mv with 1/30s 0.15mv with 1/30s	30@1920*1080(HDMI) 25@1920*1080(WiFi)	1x1	0.03ms~918ms
XFCAM1080PHD XF1080D	1080P/2M/Sony IMX185(C) 1/1.9"(7.20x4.05)	3.75x3.75	1120mv with 1/30s 0.15mv with 1/30s	60@1920*1080(HDMI) 25@1920*1080(WiFi)	1x1	0.06ms~918ms

C: Color; M: Monochrome;

Interface & Button Functions	
	USB
	USB Mouse/USB WiFi Adapter
	HDMI
	HDMI Output
	DC12V
	12V/1A Power in
	SD
	SD Card Slot
	LED
	Power Indicator Power
	ON/OFF
	On/off Switch
Other Specification for HDMI Output	
UI Operation	With USB Mouse to operate on the embedded XCamView
Image Capture	JPEG Format with 5M or 2M Resolution in SD Card (XFCAM1080PHB/PHD)
Video Record	ASF Format 1080P 30fps in SD Card(8G)
Camera Control Panel	Including Exposure, Gain, White Balance, Color Adjustment, Sharpness and Denoising Control
Auto-focus Control Panel	Including Auto-focus, Manual Focus, One Push AF and Conjugate Correction Functions
Toolbar	Including Zoom, Mirror, Comparison, Freeze, Cross, WDR, Auto-focus, Browser Function, Setting, Multi-language and XCamView Version Information
Other Specification for WiFi Output	
UI Operation	ToupView or ToupLite on Windows/Linux/OSX/Android Platform
WiFi Performance	802.11n 150Mbps; RF Power 20dBm(Maximum)
Maximum Connected Devices	3~6(According to the Environment and Connection Distance)
White Balance	Auto White Balance
Color Technique	Ultra-Fine™ Color Engine (WiFi)
Capture/Control SDK	Windows/Linux/macOS/Android Multiple Platform SDK(Native C/C++, C#/VB.NET, Python, Java, DirectShow, Twain, etc.)(WiFi)
Recording System	Still Picture or Movie (WiFi)
Software Environment (for USB2.0 Connection)	
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
	USB Port:USB2.0 High-speed Port(As Power Only, not as the USB Data Transfer)
	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

Dimension of XFCAM1080PHB/PHD Series



Images



Front- and back view



Side view



Mounted on microscope



With microscope and DMI Display



XFCAM-View User Interface mit Maus-Controll-Panel

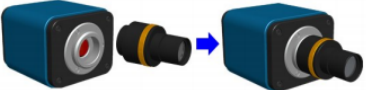
Packing information



H, I, J, K Adapter and L, M are not scope of delivery and must be ordered as extra.

Standard Packing List			
A	Gift box : L:25.5cm W:17.0cm H:9.0cm (1pcs, 1.43Kg/ box)		
B	XFCAM1080PHB/PHD		
C	Power Adapter: Input: AC 100~240V 50Hz/60Hz, Output: DC 12V 1A American standard: Model: GS12U12-P11 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 European standard:Model:GS12E12-P11 12W/12V/1A; TUV(GS)/CB/CE/ROHS 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	HDMI Cable		
E	USB Mouse		
F	Wireless network adapter with USB interface		
G	CD (Driver & utilities software, Ø12cm)		
Optional Accessory			
H	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
		C-Mount to Dia.31.75mm eyepiece tube (Please choose 1 of them for your telescope)	108008/ATA037 108009/ATA050 108010/ATA075
I	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
		C-Mount to Dia.31.75mm eyepiece tube (Please choose 1 of them for your telescope)	108011/FTA037 108012/FTA050 108013/FTA075
Note: For H and I optional items, please specify your camera type(C-mount, microscope camera or telescope camera), ToupTek engineer will help you to determine the right microscope or telescope camera adapter for your application;			
J	108015(Dia.23.2mm to 30.0mm Ring)/Adapter rings for 30mm eyepiece tube		
K	108016(Dia.23.2mm to 30.5mm Ring)/ Adapter rings for 30.5mm eyepiece tube		
L	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.)	
M	SD card(4G or 8G)		

Optional adapter to use XFCAM on 23.2 mm exe piece tubus

Extension	Picture	
C-mount Camera	 Machine vision; Medical imaging; Semiconductor equipment; Test instruments; Document scanners; 2D barcode readers; Web camera and security video; Microscope imaging;	
Microscope Camera	 XFCAM1080PHD+AMAXXX(23.2mm Adapter)  XFCAM1080PHD+FMAXXX(23.2mm Adapter)	
Telescope Camera:	 XFCAM1080PHD+ATAXXX(31.75mm Adapter)  XFCAM1080PHD+FTAXXX(31.75mm Adapter)	

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USB-Cam-XFCAM-DB-E.docx Feb-21, Version 1