TP-X7CAM4K







TP-X7CAM4K Series HDMI/NETWORK/USB 3.0 WiFi Outputs C-mount CMOS Camera

- Sony STARVIS 2 back-illuminated CMOS sensor
- 4K HDMI/ NETWORK/ USB multiple video synchronous outputs
- 4K/1080P auto switching according to monitor resolution
- High frame rate output, supporting up to 4K 75fps
- Support 4K 60fps low delay HDMI output mode, with an average delay of 40ms
- Save onboard to SD card or to USB memory stick
- Attachable 4K HDMI screen 13.3"(338mm)
- Inbuilt software XCAMView for mouse control
- The TP- X7CAM4K series camera body, made from tough, CNC aluminium alloy, ensures a heavy duty, workhorse solution.

Interface or Button **Function Description**

Connect USB mouse for easy operation with embedded XCamView software **USB Mouse**

Connect USB flash drive to save pictures and videos

Connect 5G WiFi module to transfer video wirelessly in real time

USB Video Connect PC or other host device to realize video image transmission

Comply with HDMI2.0 standard. 4K/1080P format video output and supporting automatic switch **HDMI**

between 4K and 1080P format according to the connected monitors

LAN port to connect router and switch to transfer video LAN

SD Comply with SDIO3.0 standard and SD card could be inserted for video and images saving

ON/OFF Power switch

USB3.0

LED LED status indicator

DC12V Power adapter connection (12V/1A)

Video Output Interface Function Description

Comply with HDMI2.0 standard **HDMI** Interface

60fps@4K or 60fps@1080P

support real time resolution switching(4K/1080P/720P)

H264 encoded video

LAN Interface DHCP configuration or manual configuration

Unicast/multicast configuration

WLAN Interface Connecting 5G WLAN adapter (USB3.0 slot) in AP/STA mode

Connecting USB Video port of PC for video transfer

USB Video Interface H264/MJPEG format video

Other Function **Function Description**

Video format: 8M(3840*2160) H264/H265 encoded MP4 file Video Saving

Video saving frame rate:72fps(X7CAM4K8MPA); 75fps(X7CAM4K8MPB); 60fps in low delay mode

8M (3840*2160) JPEG/TIFF image in SD card or USB flash drive(Default SD card priority, priority can **Image Capture**

be modified in settings)

Measurement information saved in different layer with image content Measurement Saving

Measurement information is saved together with image content in burn in mode

Exposure(Automatic / Manual Exposure) / Gain, White Balance(Manual / Automatic / ROI

ISP Mode), Sharpening, 3D De-noise, Saturation Adjustment, Contrast Adjustment, Brightness

Adjustment, Gamma Adjustment, Colour to Gray, 50HZ/60HZ Anti-flicker Function

Zoom In/Zoom Out(Up to 10X), Mirror/Flip, Freeze, Cross Line, Compare(Comparison between real

time video and images in SD card or USB flash drive), Embedded Files Browser, Video Playback, **Image Operation**

Measurement Function

Embedded RTC(Optional)

To support accurate time on board

Restore Factory

Restore camera parameters to its factory status Settings

Multiple Language

Support

English / Simplified Chinese / Traditional Chinese / Korean / Thailand / French / German / Spanish /

Japanese / Italian / Russian / Dutch / Portuguese

Software Environment under LAN/WLAN/USB Video Output

White Balance Auto White Balance Color Technique Ultra-Fine Color Engine

Windows/Linux/macOS/Android Multiple Platform SDK(Native C/C++, C#/VB.NET, Python, Java, Capture/Control SDK

DirectShow, Twain, etc)

Recording System Still Picture or Movie

Microsoft® Windows® XP / Vista / 7 / 8 / 8.1 /10 /11(32 & 64 bit)

Operating System OSx(Mac OS X)

Linux

CPU: Equal to Intel Core2 2.8GHz or Higher

Memory: 4GB or More

Ethernet Port: RJ45 Ethernet Port **PC** Requirements

Display:19" or Larger

CD-ROM

Operating Environment

Operating Temperature -10°~ 50° (in Centidegree)

Storage Temperature

-20°~ 60°

(in Centidegree)

30~80%RH

Operating Humidity Storage Humidity 10~60%RH

Power Supply DC 12V/1A Adapter

- SD card/USB flash drive for captured image and video storage, support local preview and playback
- New browsing function, providing rich file operations
- Excellent ISP with local tone mapping and 3D de-noising
- Provide two sets of default ISP parameters for biological and stereo microscope
- Embedded XCamView for the control of the camera control, image processing and measurements
- ImageView/ToupLite software for PC
- iOS/Android applications for smart phones or tablets

X7CAM4K Series HDMI/NETWORK/USB Multi-outputs C-mount CMOS Camera(2)

The X7CAM4K 4K series camera is intended to be used for the acquisition of digital images from the stereo microscope, biological microscope or online interactive teaching.

Order Code	Sensor & Size(mr	Sensor & Size(mm) Pixel(μm)		ensitivity FPS/Resolution k Signal		Binning Exposure	
Х7САМ4К8МРА	Sony IMX678(C) 1/1.8"(7.68x4.32) 2.0x2.0	1364mv with 1/30s 0.1mv with 1/3	72@3840*2160 30s	1x1	0.019~1000	
Х7САМ4К8МРВ	Sony IMX585(C) 1/1.2"(11.14x6.2	6) ^{2.9x2.9}	1028mv with 1/30s 0.39mv with 1,	75@3840*2160 /30s	1x1	0.048~1000	
Camera Model	Video Saving(FPS/Resolution)	HDMI2.0(FPS/Resolution)		USB3.0(FPS/Resolution)	NETWORK(FPS/Res)		
X7CAM4K8MPA	72@3840*2160	60@3840*2160 60@1920*1080		30@3840*2160 45@2688*1512 60@1920*1080	30@3840*2160 60@1920*1080 72@1280*720		
X7CAM4K8MPB	75@3840*2160	60@3840*2160 60@1920*1080		30@3840*2160 45@2688*1512 60@1920*1080	30@3840*2160 60@1920*1080 75@1280*720		

Potential Applications:

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);





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