



# MICAPS PRO4KUHD8MPCA

C-mount USB3.0 CMOS Cameras  
SONY EXMOR CMOS Sensor



## PRO4KUHD8MPCA HDMI/NETWORK/USB Multi-outputs C-mount CMOS Camera

The PRO4KUHD8MPCA Camera is a next-generation live-view imaging system with 4K resolution at 60 FPS. Equipped with a Sony Exmor CMOS sensor, it offers high sensitivity, low dark current, and no smear, thanks to the R, G, and B primary color mosaic filters. Featuring a standard C-mount interface, the camera ensures maximum compatibility with various microscopy systems. It can function as a stand-alone recorder with an HDMI monitor or TV or stream live to a PC via Gigabit Ethernet (LAN) for image capture and video recording.

### Features

- Sony EXMOR CMOS sensor
- 4K HDMI/ LAN/WLAN USB multiple video outputs
- Rolling Shutter
- 4K/1080P auto switching according to monitor resolution
- SD card/USB flash drive for captured image and video storage
- With strong ISP and other related processing functions
- iOS/Android applications for smart phones or tablets
- Windows/Linux/macOS/Android multiple platforms SDK

### 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)

Model No.	Sensor & Size(mm)	Pixel(μm)	G Sensitivity Dark Signal	FPS/Resolution	Binning	Exposure
PRO4KUHD8MPCA	4K/Sony IMX334(C) 1/1.8"(7.68x4.32)	2.0x2.0	505mv with 1/30s 0.13mv with 1/30s	60@3840*2160(HDMI) 30@3840*2160(NETWORK) 30@3840*2160(USB)	1x1	0.04~2000

C: Color.

Interface or Button	Function Description
USB Mouse	Connect USB mouse for easy operation with embedded PROView software
USB3.0	Connect USB flash drive to save pictures and videos (Host Mode)
	Connect 5G WiFi module to transfer video wirelessly in real time(AP/STA, Host Mode)
	Connect computer with USB connection to transfer video in real time(Device Mode)
HDMI	Comply with HDMI2.0 standard. 4K/1080P format video output and supporting automatic switch between 4K and 1080P format according to the connected monitors
LAN	LAN port to connect router and switch to transfer video
SD	SD card, comply with SDIO3.0 standard and SD card could be inserted for video and images saving
ON/OFF	Power switch
LED	LED status indicator
DC12V	Power adapter connection (12V/1A)

Video Output Interface	Function Description
HDMI Interface	Comply with HDMI2.0 standard
	60fps@4K or 60fps@1080P(PRO4KUHD8MPCA)
LAN Interface	30ps@4K resolution, support real time resolution switching H264 encoded video Bandwidth adjustment in real time DHCP configuration or manual configuration Unicast/multicast configuration
WiFi Interface	Connecting 5G WLAN adapter (USB3.0 slot) in AP/STA mode
USB 3.0 Slot	Connecting USB Video port of PC for video transfer(Device Mode);MJPEG format video

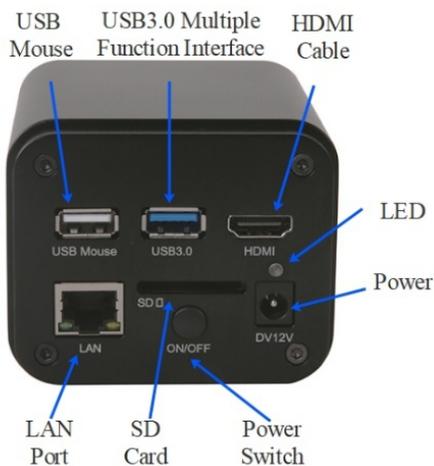
Other Function	Function Description
Video Saving	Video format:8M(3840*2160) H264 encoded MP4 file Video saving frame rate: 50~260fps(PRO4KUHD8MPCA) .(related with SD card and video resolution)
Image Capture	8M (3840*2160, PRO4KUHD8MPCA) JPEG/TIFF image in SD card or USB flash Drive
Measurement Saving	Measurement information saved in different layer with image content Measurement information is saved together with image content in burn in mode
ISP	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 Operation	Zoom In/Zoom Out(Up to 10X), Mirror/Flip, Freeze, Cross Line, Compare(Comparison between realtime video and images in SD card or USB flash drive ), 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 / Thailand / French / German / Spanish /Japanese / Italian / Russian / Dutch / Portuguese

### 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

### Software Environment under LAN/WLAN/USB Video Output

White Balance	Auto White Balance
Color Technique	Super-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 /11(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



### LABLINK INSTRUMENTS

- Plot no. 337, Sector 2, HSIIDC Saha, Saha, Ambala (Haryana) India - 133104.
- Plot no 3-6-164/2, 2nd Street, Hyderguda Himayatnagar, Hyderabad (Telangana )India - 500029

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