MICAPS ECO4KUHD8MPCD

C-mount USB3.0 CMOS Cameras
SONY STARVIS 2 CMOS Sensor

The ECO4KUHD8MPCD camera is a cutting-edge live-view imaging system that boasts 4K resolution video at 30 frames per second. It features a Sony Exmor CMOS sensor known for its high sensitivity and low dark current, ensuring crisp images without smearing thanks to its R, G, and B primary color mosaic filters. This camera is designed with a standard C-mount interface, ensuring compatibility with a wide range of microscopy systems. It can function as a standalone recorder when connected to an HDMI monitor or TV, or it can be live-streamed to a PC via USB for image capture and video recording. The camera includes hardware 3D denoising, sharpness, and tone mapping control functions.

The accompanying Windows software provides tools for image development, measurement, and advanced features like image stitching and extended depth of focus. It can calibrate scales at various magnifications, making it suitable for multi-level inspection tasks. For Mac and Linux users, there's a lite version of the software available, offering video and image capture capabilities with limited processing features. Overall, the ECO4KUHD8MPCD 4K series camera is tailored for acquiring digital images from stereo microscopes, biological microscopes, or for online interactive teaching purposes.

Features

- Sony Exmor back illuminated CMOS sensor
- 4K HDMI/USB multiple video outputs
- 4K/1080P auto switching according to the display resolution
- SD card for the captured image and video storage
- Embedded MicroView for the control of the camera
- With strong ISP and other related processing functions
- MicroView/MicroLite software for PC
- Micaps software for MAC

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
ECO4KUHD8MPCD	Sony IMX585(C) 1/1.2"(11.14x6.26)	2.9 x2.9	1028mv with 1/30s 0.13mv with 1/30s	30@3840*2160(HDMI) 20@3840*2160(USB)	1x1	0.04ms~1000 ms

Interface or Button	Function Description
USB Mouse	Connect USB mouse for easy operation with embedded UPROView software
USB Video	Connect PC or other host device to realize video image transmission
HDMI	Comply with HDMI1.4 standard. 4K or 1080P format video output for standard monitor
SD	SD card, comply with SDIO3.0 standard and SD card could be inserted for video & 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 HDMI1.4 standard 30fps@4K or 30fps@1080P
USB Video Interface	Connecting USB Video port of PC for video transfer MJPEG format video
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, Display:19" or Larger, CD-ROM

Other Function	Function Description
Video Saving	Video format: 8M(3840*2160) H264/H265 encoded MP4 file Video saving frame rate:30fps
Image Capture	8M (3840*2160) JPEG/TIFF image in SD card
Measurement Saving	Measurement information saved in different layer with image contentMeasurement 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, 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 / Thailand / French / German / Japanese / Italian / Russian

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, 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

LABLINK INSTRUMENTS

- Plot no. 435, Sector 2, HSIIDC Saha, Saha, Ambala (Haryana) India - 133104.
- Plot no 3-6-164/2, 2nd Street, Hyderguda Himayatnagar, Hyderabad (Telangana)India - 500029.

Contact us:

Email:- info@lablinkinstruments.com
www.lablinkinstruments.com, www.micaps.com