MICAPS SVFL4KUHD8MPCA

C-mount USB 2.0 CMOS Cameras
SONY STARVIS CMOS Sensor

The SVFL4KUHD8MPCA is a high-performance HDMI camera from Micaps, designed for versatility and ease of use. It features multiple output options—HDMI, Wi-Fi, and USB—making it easy to connect to a monitor, computer, or mobile device. Whether you're capturing images for on-site analysis or recording videos for later research, you can save everything directly to an SD card or USB flash drive. Powered by an advanced CMOS sensor and a built-in ARM core, this camera delivers fast, reliable performance. You can control all its features using a USB mouse through a simple on-screen interface—no extra software or computer required when using HDMI mode.
One of its standout features is the built-in Auto Focus system, which automatically adjusts focus on specific areas of your sample, saving you time and effort during inspections or observations.
For more advanced control, you can connect it via Wi-Fi or USB and use the software MicroView on your computer to manage the camera and capture images.
Ideal for microscope imaging, tool inspection, or even interactive teaching, the SVFL4KUHD8MPCA is a powerful and flexible solution for capturing high-quality digital images and videos in a variety of professional settings.

Features

- Sony Exmor/STARVIS back-illuminated CMOS sensor
- Rolling Shutter
- 4K HDMI/ WLAN/ USB multiple video outputs C-mount camera
- 4K/1080P auto switching according to monitor resolution
- Embedded SVFLView for the control of the camera and image processing
- Excellent ISP with local tone mapping and 3D denoising
- MicroView/MicroLite software for PC
- iOS/Android applications for smart phones or tablets
- SD card/USB flash drive for captured image and video storage, support local preview and playback

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)

Order Code	Sensor & Size(mm)	Pixel(μm)	G Sensitivity Dark Signal	FPS/Resolution	Binning	Exposure
SVFL4KUHD8MPCA	4K/Sony IMX334(C) 1/1.8"(7.68x4.32)	2.0x2.0	505 mv with 1/30s 0.1mv with 1/30s	30@3840x2160(HDMI) 30@3840x2160(WiFi) 30@3840x2160(USB)	1x1	0.04ms~1000ms

Interface OR Button	Function Description
USB Mouse	Connect USB mouse for easy operation with embedded software
USB 2.0	Connect USB flash drive to save pictures and videos
	Connect 5G WLAN module to transfer video wirelessly in real time
USB VIDEO	Connect PC or other host device to realize video image transmission
HDMI	Comply with HDMI1.4 standard. 4K/1080P format video output and supporting automatic switch between 4K and 1080P format according to the connected monitors
ON/OFF	Power switch
LAN	LAN port to connect router and switch to transfer video
SD	Comply with SDIO3.0 standard and SD card could be inserted for video and images saving
DC12V	Power adapter connection (12V/1A)

Software Environment Under Lan/wan/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 and 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

C: Color

Video Output Interface	Function Description
HDMI Interface	Comply with HDMI1.4 standard, 30fps@4K or 30fps@1080P
LAN Interface	support real time resolution switching(4K/1080P/720P) H264 encoded video DHCP configuration or manual configuration Unicast/multicast configuration
WiFi Interface	Connecting 5G WiFi adapter (USB2.0 slot) in AP/STA mode
USB Video Interface	Connecting USB Video port of PC for video transfer in Mjpeg format
Other Function	**Function Description**
Video Saving	Video format:8M(3840*2160) H264/H265 encoded Mp4 file Video saving frame rate:30fps in SD card or USB flash drive
Image Capture	8M (3840*2160) 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
Video/Image Operation	Zoom In/Zoom Out(Up to 10X), Mirror/Flip, Color/Gray, Freeze, Cross Line, Overlay , Auto Focus, Compare(Comparison between real time video and images in SD card/ 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 / Japanese / Italian / Russian

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

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- Plot no 3-6-164/2, 2nd Street, Hyderguda Himayatnagar, Hyderabad (Telangana)India - 500029

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