



MICAPS HPSCMOS SERIES

C-mount USB 2.0 CMOS Cameras
SONY CMOS Sensor



The HPSCMOS series camera features a top-notch SONY Exmor CMOS sensor for capturing images, with USB2.0 serving as the data transfer interface. HPSCMOS hardware resolutions range from 1.2M to 8.3M and come with the integrated CNC aluminum alloy compact housing. It comes equipped with the MicroView application for advanced video and image processing. The camera also offers a versatile range of platform support, including Windows, Linux, macOS, and Android, along with multiple SDK options (Native C/C++, C#/VB.NET, Python, Java, DirectShow, Twain, etc). Ideal for bright field light environments, the HPSCMOS is well-suited for microscope image capture and analysis, and analysis, boasting a higher frame rate.

Features

- Standard C-Mount camera with Sony Starvis (Back illuminated) CMOS sensor
- Rolling Shutter
- CNC aluminum alloy housing
- USB2.0 interface ensuring high speed data transmission
- Ultra-Fine color engine with perfect color reproduction capability
- With advanced video & image processing application MicroView
- Windows/Linux/macOS/Android multiple platform SDK

Applications

- 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)
- Scientific research, education (teaching, demonstration and academic exchanges)

Order Code	Sensor & Size(mm)	Pixel(μm)	G Sensitivity Dark Signal	FPS/Resolution	Binning	Exposure
HPSCMOS8300CA	8.3M/IMX274(C) 1/2.5"(6.22x3.50)	1.62x1.62	236mv with 1/30s 0.1mv with 1/30s	4@3840x2160 16@1920x1080	1x1 2x2	0.244ms~15s
HPSCMOS6600CA	6.6M/IMX326(C) 1/2.9"(4.98x3.50)	1.62x1.62	236mv with 1/30s 0.1mv with 1/30s	5@3072x2160 6@2592x1944 6@3072x1728 7@2160x2160	1x1 1x1 1x1 1x1	0.244ms~15s
HPSCMOS5300CA	5.3M/IMX178(C) 1/1.9" (7.37x4.15)	2.4x2.4	425mvwith 1/30s 0.15mv with 1/30s	5.5@3072 x1728 35@1280x720	1x1 2x2	0.105ms~15s
HPSCMOS5000CA	5.0M/IMX335(C) 1/2.8" (5.18x3.89)	2.0x2.0	505mvwith 1/30s 0.13mv with 1/30s	6.4@2592 x1944 26.7@1296x972	1x1 2x2	0.1ms~15s
HPSCMOS3100CA	3.1M/IMX123(C) 1/2.8" (5.12x3.84)	2.5x2.5	600mvwith 1/30s 0.15mv with 1/30s	11.5@2048x1536 18.3@1920x1080 18.1@1600x1200 29.5@1024x768	1x1 1x1 1x1 2x2	0.105ms~15s
HPSCMOS2000CA	2.0M/IMX290(C) 1/2.8"(5.56x3.13)	2.9 x2.9	1300mvwith 1/30s 0.15mv with 1/30s	17@1920x1080	1x1	0.105ms~15s
HPSCMOS1200CA	1.2M/IMX224(C) 1/3"(4.80x3.60)	3.75 x3.75	2040mvwith 1/30s 0.15mv with 1/30s	27@1280x960 54@640x480	1x1 2x2	0.105ms~15s

Other Hardware Configuration

Spectral Range	380-650nm (with IR-filter), for Monochromatic Camera, AR Is Used
White Balance	ROI White Balance/ Manual Temp-Tint Adjustment
Color Rendering 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)
ADC	8 Bit
Recording System	Still Picture and Movie
Cooling System*	Natural

Software Environment

Operating System	Support Microsoft Windows XP / Vista / 7 / 8 / 10(32 & 64 bit)OS X (Mac OS X), Linux
PC Requirements	CPU: Equal to Intel Core2 2.8GHz or Higher
	Memory: 2GB or More
	USB port: USB2.0 High-speed Port
	Display: 17" or Larger
	CD-ROM

Operating Environment

Operating Temperature	-10 °C~ 50 °C
Storage Temperature	-20 °C~ 60 °C
Operating Humidity	30~80%RH
Storage Humidity	10~60%RH
Power Supply	DC 5V over PC USB Port,

