MICAPS HPS3CMOS20000CA

C-mount USB 3.0 CMOS Cameras
SONY PREGIUS CMOS Sensor

The HPS3CMOS20000CA camera uses a high-quality SONY PREGIUS CMOS sensor to capture images, and it employs USB 3.0 for fast data transfer. With a hardware resolution of 20 megapixels, it's housed in a durable CNC aluminum alloy casing. Equipped with a 12-bit Super-fine Hardware Image Signal Processor Video Pipeline (Super-FineTM HISPVP), the HPS3CMOS20000CA handles tasks like Demosaic, Adjustments, Automatic Exposure, Gain Adjustment, One Push WhiteBalance, Chrominance Adjustment, Saturation Adjustment, Gamma Correction, Luminance Adjustment, and Contrast Adjustment. It processes Bayer data and produces RAW data for 8/12 bit output. This offloads heavy processing tasks from the PC to the Super-FineTM HISPVP, significantly boosting processing speed. The camera comes bundled with the advanced Micaps MicroView video and image processing application. It supports multiple platforms such as Windows, Linux, macOS, and Android, with SDKs available for Native C/C++, C#/VB.NET, Python, Java, DirectShow, Twain, and more. The HPS3CMOS20000CA is well-suited for use in bright field light environments and excels in microscope image capture and analysis, offering a higher frame rate for superior performance.

Features

- SONY PREGIUS Back-illuminated CMOS sensor with USB 3.0 interface
- Ultra low noise and low power dissipation
- Rolling Shutter
- Standard C-Mount camera
- With advanced video & image processing application Micaps MicroView
- Ultra-fine Color hardware Color Engine ensuring high frame rates
- (Up to 15 frames for 20M Resolution)

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
HPS3CMOS20000CA	20M/IMX183[C] 1 “(13.06x8.76)	2.4 x2.4	462mv with 1/30s 0.21mv with 1/30s	15@5440x3648 50@2736x1824 60@1824x1216	1x1 2x2 3x3	0.1ms~15s

C: Color

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, irectShow, Twain, etc);
ADC	8 Bit / 12 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

LABLINK INSTRUMENTS

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

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