MICAPS HPTEC3CMOS9000MA

C-mount USB 3.0 CMOS Cameras
SONY STARVIS CMOS Sensor

The HPTEC3CMOS9000MA camera utilizes a SONY STARVIS CMOS sensor for capturing images, and it connects via USB 3.0 for efficient data transfer. The HPTEC3CMOS9000MA hardware resolutions is 9.0MP, housed in a compact CNC aluminum alloy casing with Two-stage TE-cooling. Equipped with a two-stage peltier coolingsystem, the sensor chip can reach temperatures as low as -42 degrees below the ambient temperature. This feature significantly improves the signal-to-noise ratio and reduces image noise. The camera is designed with a smart structure to enhance heat radiation efficiency and prevent moisture-related issues. An controllable electric fan is incorporated to expedite the heat dissipation process.

The HPTEC3CMOS9000MA comes bundled with the advanced Micaps MicroView application for video and image processing. It supports multiple platforms, including Windows, Linux, macOS, and Android, with SDKs for various programming languages such as Native C/C++, C#/VB.NET, Python, Java, DirectShow, Twain, and more.This camera is well-suited for applications in low-light environments, as well as capturing and analyzing microscope fluorescence images. Additionally, it can be utilized for deep-sky astronomy applications.

Features

- SONY STARVIS CMOS sensor with USB 3.0 interface
- Peltier Sensor chip cooling up to 42°C below ambient temperature
- Working temperature can be regulated to specified temperature in 5 minutes
- Rolling Shutter
- IR-CUT/AR coated windows
- Up to 1 hour long time exposure
- Super-FineTM color engine with perfect color reproduction capability Support both video and trigger modes

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)

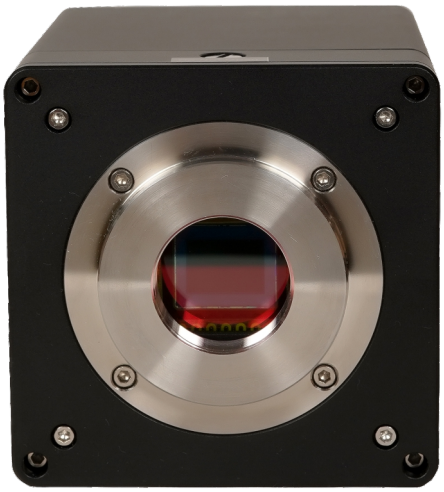
Model No.	Sensor & Size(mm)	Pixel(μm)	G Sensitivity Dark Signal	FPS/Resolution	Binning	Exposure
HPTEC3CMOS9000CA	9M/IMX533(M) 1"(11.28x11.28)	3.76 x3.76	534mv with 1/30s 0.04mv with 1/30s	40@2992x3000 62@1488x1500 186@992x998 8 Bit / 14 Bit	1x1 2x2 3x3	0.1ms~1h

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)
Recording System	Still Picture and Movie
Cooling System*	Two-stage TE-cooling System -42 °C below Camera Body Temperature

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, External Power Adapter for Cooling System, DC12V,3A

M: Monochrome

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



LABLINK INSTRUMENTS

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