



# MICAPS SVTEC3CMOS20000CA

C-mount USB 3.0 CMOS Cameras  
SONY PREGIUS CMOS Sensor



The SVTEC3CMOS20000CA camera is equipped with a high-quality SONY PREGIUS CMOS sensor for capturing images. It utilizes USB 3.0/GigE as the transfer interface to enhance the frame rate. SVTEC3CMOS20000CA hardware resolutions is 20MP and come with the integrated CNC aluminum alloy compact housing.

Thanks to the peltier cooling sensor chip, the temperature is lowered by 5-10 degrees below the ambient level. This significantly improves the signal-to-noise ratio and reduces image noise. The camera is designed with a smart structure to ensure efficient heat radiation and prevent moisture issues. An electric fan is incorporated to speed up the heat radiation process. Working temperature can be regulated to specified temperature in 5 minutes. The SVTEC3CMOS20000CA includes an advanced video and image processing application called MicroView/MicroLite. It offers a versatile software development kit (SDK) compatible with Windows, Linux, and OSX platforms. It supports Native C/C++, C#/VB.NET, DirectShow, and Twain Control API. This camera is well-suited for applications in low-light environments, microscope fluorescence image capture and analysis, and deep-sky astronomy.

#### Features

- TE-cooling with controllable electric fan
- Standard C-Mount camera with Sony PREGIUS CMOS sensor
- Rolling Shutter
- IR-CUT/AR coated windows
- Up to 5-minutes long time exposure
- Support capture image with video /tigger mode
- Super-Fine color engine with perfect color reproduction capability
- With advanced video & image processing application MicroView/MicroLite

#### 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
SVTEC3CMOS20000CA	20M/IMX183(C) 1 "(13.056x8.755)	2.4 x2.4	462mv with 1/30s 0.21mv with 1/30s	19.0@5440x3648 48.8@2736x1824 59.4@1824x1216 8 Bit / 12 Bit	1x1 2x2 3x3	53us~300s

#### 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	External Power Adapter for camera and cooling system, DC12V,3A

#### 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: USB3.0 High-speed Port
	Display: 17" or Larger
	CD-ROM

#### 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

C:Color, GS: Rolling Shutter

#### LABLINK INSTRUMENTS

- Plot no. 337, 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

