MICAPS
ECOCMOS5100CB

C-mount USB 2.0 CMOS Cameras
SONY STARVIS CMOS Sensor

Micaps ECOCMOS5100CB camera is a powerful yet compact device designed for high-performance imaging. It features a Sony STARVIS CMOS sensor for capturing images, and its USB 2.0 interface allows for fast data transmission. The ECOCMOS5100CB camera hardware resolutions is 5.1MP and is housed in a durable zinc aluminum alloy casing. Thanks to Micaps advanced MJPEG compression algorithm, along with their unique decoding and image restoration methods in MicroView, this USB 2.0 camera boasts the highest frame rate in the industry. Additionally, the ECOCMOS5100CB camera is equipped with a built-in Super-fine hardware ISP engine, ensuring excellent color restoration for high-quality images.

- Support automatic/manual exposure switching, accurate exposure time control,
- Real-time adjustment of exposure target area.
- Support automatic/manual/ROI white balance.
- Support color adjustment/color mode selection/image flipping.
- Support histogram adjust/flat field correction/dark field correction/video ROI.

ECOCMOS comes with advanced video & image processing application MicroView, Providing Windows/Linux/macOS/Android multiple platform SDK(Native C/C++, C#/VB.NET, Python, Java, DirectShow, Twain, etc).
The ECOCMOS5100CB can be widely used in brightfield light environment and microscope image capture and analysis with moderate frame rate.

Features

- Standard C-Mount camera with STARVIS CMOS sensors
- Rolling Shutter
  Built in Super-fine hardware ISP engine ensures high color restoration
- Comply with CE and FCC agreements
- Support the capture of video and image in software / hardware trigger mode
  Super-Fine color engine with perfect color reproduction capability
  With advanced video & image processing application Micaps MicroView
- Compatible with Microsoft USB Video Class protocol and support the third-party software development

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
ECOCMOS5100CB	5.1M/IMX335(C) 1/2.8" (5.18x3.89)	2.0x2.0	505mV 70dB 43dB	26@2592x1944 26@1280x960 26@640x480	1x1 1x1 1x1	0.1-2000 ms

Software Environment		Other Hardware Configuration	
Operating System	Support Microsoft Windows XP / Vista / 7 /8 /10(32 & 64 bit) OS X (Mac OS X), Linux	Spectral Range	380-650nm (with IR-filter), for Monochromatic Camera, AR Is Used
PC Requirements	CPU: Equal to Intel Core2 2.8GHz or Higher	White Balance	ROI White Balance/ Manual Temp-Tint Adjustment
	Memory: 2GB or More	Color Rendering Technique	Super Fine Color Engine
	USB port: USB2.0 High-speed Port	Capture/Control SDK	Windows/Linux/macOS/Android Multiple Platform SDK(Native C/C++, C#/VB.NET, Python, Java, DirectShow, Twain, etc.)
	Display: 17" or Larger	Recording System	Still Picture and Movie
	CD-ROM	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