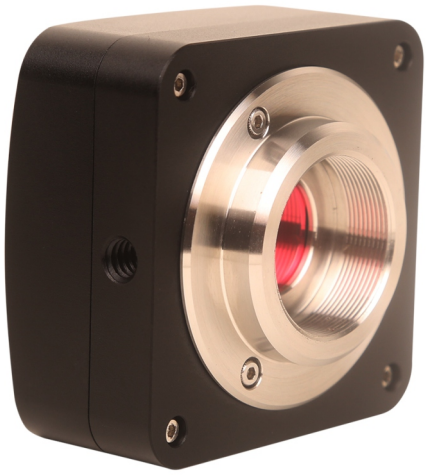
MICAPS ECOCMOS8300CA

C-mount USB 2.0 CMOS Cameras
SONY CMOS Sensor



Micaps ECOCMOS8300CA camera is a powerful yet compact device designed for high-performance imaging. It features a Sony CMOS sensor for capturing images, and its USB 2.0 interface allows for fast data transmission. The ECOCMOS8300CA camera hardware resolutions is 8.3MP 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 ECOCMOS8300CA 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 ECOCMOS8300CA can be widely used in brightfield light environment and microscope image capture and analysis with moderate frame rate.

Features

- Standard C-Mount camera with SONY 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
ECOCMOS08300CA	8.3M/IMX274(C) 1/2.5“ (6.22x3.50)	1.62x1.62	236mV 70dB 43dB	30@3840x2160 30@1920x1080 30@1280x720 30@960x540	1x1 1x1 1x1	0.1-2000 ms

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

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

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.

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