



MICAPS ECOCMOS SERIES

C-mount USB 2.0 CMOS Cameras SONY CMOS Sensor



Micaps ECOCMOS Series 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 ECOCMOS Series camera hardware resolutions is 2.1 to 12MP 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 ECOCMOS Series 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 ECOCMOS Series 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
ECOCMOS8300CA	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
ECOCMOS12000CA	12M/IMX577(C) 1/2.3" (5.95x4.71)	1.55x1.55	250LSB 70dB 43dB	20@3840x3040 20@1920x1520 20@960x760	1x1 1x1 1x1	0.1-2000 ms
ECOCMOS5100CA	5.1M/AR0521(C) 1/2.5" (5.70x4.28)	2.2x2.2	18.8ke-/lus 73dB 40dB	30@2592x1944 30@1280x960 30@640x480	1x1 1x1 1x1	0.1-1000 ms
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
ECOCMOS3100CA	3.1M/Aptina(C) 1/2.5" (5.73x4.3)	2.8x2.8	18.8ke-/lus 73dB 40dB	30@2048x1536 30@1024x768	1x1 1x1	0.1-1000 ms
ECOCMOS2100CA	2.1M/IMX307(C) 1/2.8" (5.73x4.3)	2.9x2.9	1300mV 73dB 43dB 40dB	38@1920x1080 38@960x540	1x1 1x1	0.1-2000 ms

LABLINK INSTRUMENTS

- Plot no. 435, 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



Software Environment		Operating Environment	
Operating System	Support Microsoft Windows XP / Vista / 7 / 8 / 10(32 & 64 bit) OS X (Mac OS X), Linux	Operating Temperature	-10 °C~ 50 °C
PC Requirements	CPU: Equal to Intel Core2 2.8GHz or Higher	Storage Temperature	-20 °C~ 60 °C
	Memory: 2GB or More	Operating Humidity	30~80%RH
	USB port: USB2.0 High-speed Port	Storage Humidity	10~60%RH
	Display: 17" or Larger	Power Supply	DC 5V over PC USB Port, External Power Adapter for Cooling System, DC12V,3A
	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



LABLINK INSTRUMENTS

- Plot no. 435, 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

