



# MICAPS WFTINYCMOS SERIES

CMOS eyepiece Cameras USB 2.0



The Micaps WFTINYCMOS is an upgraded version of Micaps' compact CMOS eyepiece camera, featuring a fixed reduction lens that expands the field of view when used with a microscope eyepiece tube. Designed to be both simple and efficient, the "WFTINYCMOS" name reflects its lightweight, compact build ("WF" for wide field, "TINY" for its size, and "CMOS" for the sensor type). It offers an economical solution without compromising on functionality. Equipped with a high-speed USB 2.0 interface, the WFTINYCMOS ensures smooth, uninterrupted video streaming at high frame rates. It also comes with the powerful MicroView software, which provides advanced image and video processing tools for enhanced usability. This camera is a great way to convert standard mono or binocular student microscopes into digital microscopes. And with the included 23.2 mm to 30 mm or 23.2 mm to 30.75 mm adapter rings, it's also compatible with stereo microscopes, making it easy to upgrade them into digital stereo microscopes.

### Features

- Microscope eyepiece Camera with 23.2 diameter and compact size
- An extension of Micaps TINYCMOS Camera with fixed reduction lens to ensure the full field of view of the microscope from the eyepiece can be imaged to the CMOS sensor
- High-quality Camera with Aptina CMOS sensor
- Auto white balance and auto-exposure; Brightness, contrast, chroma, and saturation can be adjusted
- High-speed USB2.0 interface and high frame rate video display keep the screen smooth without interruption
- With advanced video & image processing application MicroView

### 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<br>Dark Signal | FPS/Resolution                                             | Binning           | Exposure    |
|-------------------|--------------------------------------|-----------|------------------------------|------------------------------------------------------------|-------------------|-------------|
| WFTINYCMOS5000CA  | 5.0M/Aptina(C)<br>1/2.5" (5.70x4.28) | 2.2x2.2   | NA                           | 2@2592x1944<br>3@2048x1536<br>5@1600x1200<br>7.5@1280x1024 | N/A               | Auto        |
| WFTINYCMOS3000CA  | 3.0M/Aptina(C)<br>1/2.7" (4.51x3.38) | 2.2x2.2   | NA                           | 3@2048x1536<br>5@1600x1200<br>7.5@1280x1024                | N/A               | Auto        |
| WFTINYCMOS2000CA  | 2.0M/Aptina(C)<br>1/3.2" (4.48x3.36) | 2.8x2.8   | NA                           | 5@1600x1200<br>7.5@1280x1024<br>7.5@1280x960<br>20@800x600 | N/A               | Auto        |
| WFTINYCMOS1300CA  | 1.3M/Aptina(C)<br>1/3" (4.60x3.70)   | 3.6x3.6   | NA                           | 7.5@1280x1024<br>12.5@1024x768<br>12.5@800x600             | N/A               | Auto        |
| WFTINYCMOS0350CA  | 0.35M/Aptina(C)<br>1/4" (3.58x2.69)  | 5.6x5.6   | NA                           | 30@640x480                                                 | N/A               | Auto        |
| WFTINYCMOS05100CB | 5.1M/IMX335(C)<br>1/2.8" (5.18x3.89) | 2.0x2.0   | 505mV<br>70dB<br>43dB        | 26@2592x1944<br>26@1280x960<br>26@640x480                  | 1x1<br>1x1<br>1x1 | 0.1-2000 ms |

| Software Environment Under Lan/wan/usb Video Output |                                                                                                                                   |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Spectral Range                                      | 380-650nm (with IR-cut Filter)                                                                                                    |
| White Balance                                       | Auto White Balance                                                                                                                |
| Color Technique                                     | N/A                                                                                                                               |
| 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                                                                                                           |
| Data Format                                         | MJPEG                                                                                                                             |
| Cooling System*                                     | Natural                                                                                                                           |
| Operating System                                    | Microsoft® Windows® XP / Vista / 7 / 8 / 8.1 /10(32 & 64 bit), OSx(Mac OS X), LINUX                                               |
| PC Requirements                                     | CPU: Equal to Intel Core2 2.8GHz or Higher, Memory: 4GB or More, Ethernet Port: RJ45 Ethernet Port, Display:19" or Larger, CD-ROM |

| Operating Environment                  |                        |
|----------------------------------------|------------------------|
| Operating Temperature (in Centidegree) | -10°~50°               |
| Storage Temperature (in Centidegree)   | -20°~60°               |
| Operating Humidity                     | 30~80%RH               |
| Storage Humidity                       | 10~60%RH               |
| Power Supply                           | DC 5V over PC USB port |

