

## C3CMOS Basic Characteristic

C3CMOS is an ultra-high performance USB3.0 CMOS camera and it adopts ultra-high performance CMOS sensor as the image-picking device and USB3.0 is used as the data transfer interface.

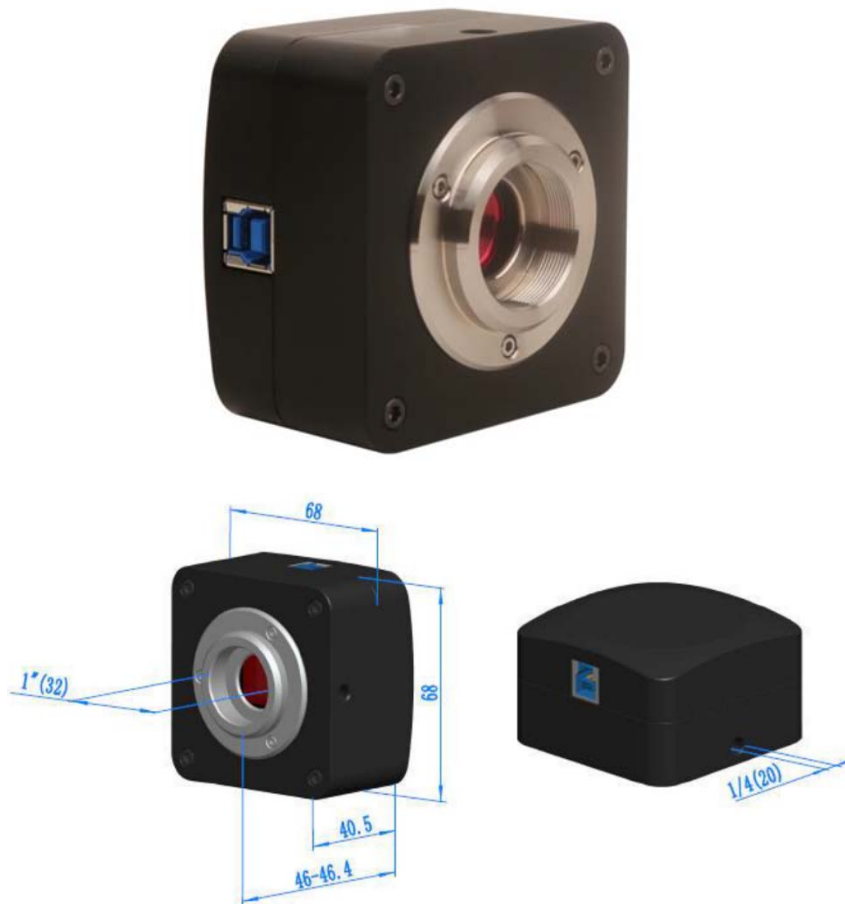
C3CMOS hardware resolutions range from 3.0M to 10M and come with the integrated zinc aluminum alloy compact housing.

C3CMOS comes with advanced video & image processing application ToupView; Providing Windows/Linux/ OSX multiple platforms SDK; Native C/C++, C#/VB.NET, DirectShow, Twain Control API;

The C3CMOS can be widely used in bright field light environment and microscope image capture and analysis with higher frame rate.

The basic characteristic of the C3CMOS cameras are as follows:

- ❑ Standard C-Mount camera with Aptina CMOS sensor;
- ❑ With hardware resolution among 3.0M to 10M;
- ❑ Integrated zinc aluminum alloy housing;
- ❑ USB3.0 Gbps interface ensuring high frame rate;
- ❑ With advanced video & image processing application ToupView;
- ❑ Providing Windows/Linux/Mac OS multiple platforms SDK;
- ❑ Native C/C++, C#/VB.NET, DirectShow, Twain Control API;



## Available Versions:

### 10.9.2 C3CMOS Datasheet(4)

Order Code	Sensor & Size	Pixel(μm)	G Responsivity Dynamic range SNRmax	FPS/Resolution	Binning	Exposure
C3CMOS10000KPA CP110001A 20190518	10M/MT9J003(C) 1/2.3" (5.98x4.58)	1.67x1.67	0.31v/lux-sec 65.2dB 34dB	7.2@3664x2748 23.8@1832x1374 77.4@912x686	1x1 2x2 4x4	0.1ms~2000ms
C3CMOS05100KPA CP105100A 20181030	5.1M/MT9P006(C) 1/2.5" (5.70x4.28)	2.2x2.2	1.76v/lux-sec 67.74dB 38.5dB	14.0@2592x1944 29.4@1280x960 103.1@640x480	1x1 2x2 4x4	0.1ms~2000ms
C3CMOS05100KPB CP105100B 20200118	5.1M/IMX335(C) 1/2.8" (5.18x3.89)	2.0x2.0	505mV 70dB 43dB	20@2592x1944 40@1296x972	1x1 2x2	0.1ms~2000ms
C3CMOS03500KPA CP103500A 20200118	3.5M/SC4236(C) 1/2.6" (5.76x3.84)	2.5x2.5	3.0v/lux-sec 72dB 37dB	30@2304x1536 30@1152x768	1x1	0.1ms~2000ms

C: Color; M: Monochrome;

Other Specification for C3CMOS Camera	
Spectral Range	380-650nm (with IR-cut Filter)
White Balance	ROI White Balance/ Manual Temp Tint Adjustment/NA for Monochromatic Sensor
Color Technique	Ultra-Fine™ Color Engine/NA for Monochromatic Sensor
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*	Natural
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
Software Environment	
Operating System	Microsoft® Windows® XP / Vista / 7 / 8 / 10 (32 & 64 bit) OSx(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

## Packaging Details



### Standard Camera Packing List

A	Carton L:52cm W:32cm H:33cm (20pcs, 12~17Kg/ carton), not shown in the photo
B	Gift box L:15cm W:15cm H:10cm (0.67~0.7Kg/ box)
C	U3CMOS series USB3.0 C-mount CMOS camera
D	High-speed USB3.0 A male to B male gold-plated connectors cable /2.0m
E	CD (Driver & utilities software, Ø12cm)

### Optional Accessory

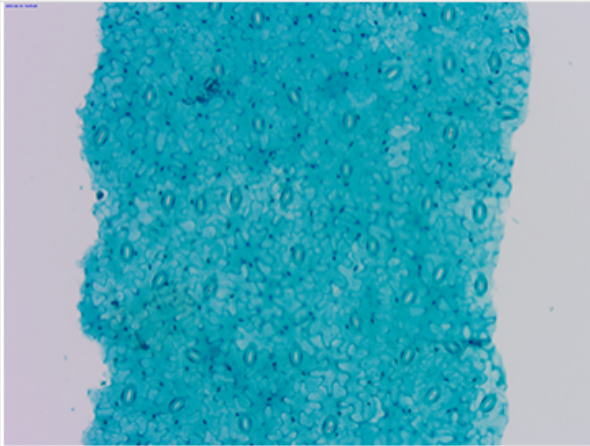
F	Adjustable lens adapter	C-mount to Dia.23.2mm eyepiece tube (Please choose 1 of them for your microscope)	108001/AMA037 108002/AMA050 108003/AMA075
		C-mount to Dia.31.75mm eyepiece tube (Please choose 1 of them for your telescope)	108008/ATA037 108009/ATA050 108010/ATA075
G	Fixed lens adaptor	C-mount to Dia.23.2mm eyepiece tube (Please choose 1 of them for your microscope)	108005/FMA037 108006/FMA050 108007/FMA075
		C-Mount to Dia.31.75mm Eyepiece Tube (Please choose 1 of them for your telescope)	108011/FTA037 108012/FTA050 108013/FTA075
<p>Note: For F and G optional items, please specify your camera type(C-mount, microscope camera or telescope camera) , ToupTek engineer will help you to determine the right microscope or telescope camera adapter for your application;</p>			
H	108015(Dia.23.2mm to 30.0mm Ring)/Adaptor rings for 30mm eyepiece tube		
I	108016(Dia.23.2mm to 30.5mm Ring)/ Adaptor rings for 30.5mm eyepiece tube		
J	108017(Dia.23.2mm to 31.75mm Ring)/ Adaptor rings for 31.75mm eyepiece tube		
K	Calibration Kit	106011/TS-M1(X=0.01mm/100Div.); 106012/TS-M2(X,Y=0.01mm/100Div.); 106013/TS-M7(X=0.01mm/100Div., 0.10mm/100Div.)	

## Optional Adapters

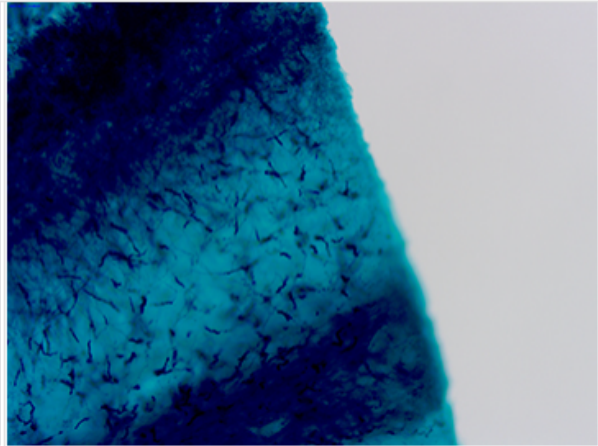


## Sample Images - Captured with C3CMOS Camera(C3CMOS18000KPA)

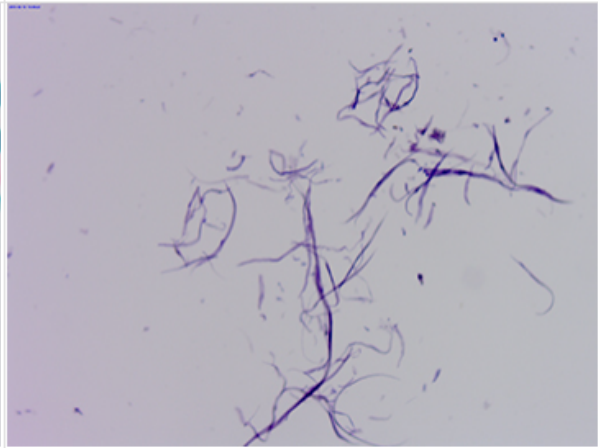
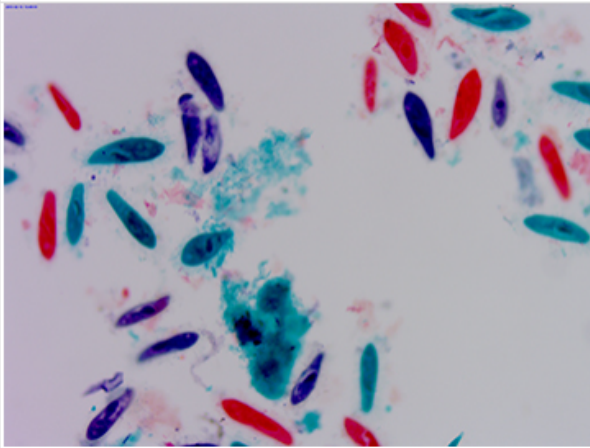
The microscope slide images are captured with TPS006050 slide(01-025) package and with U3CMOS18000KPA camera.



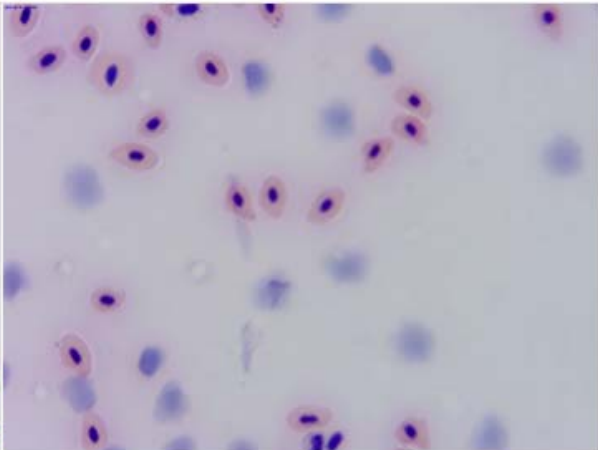
1. Broad Bean Leaf Epidermis W.M



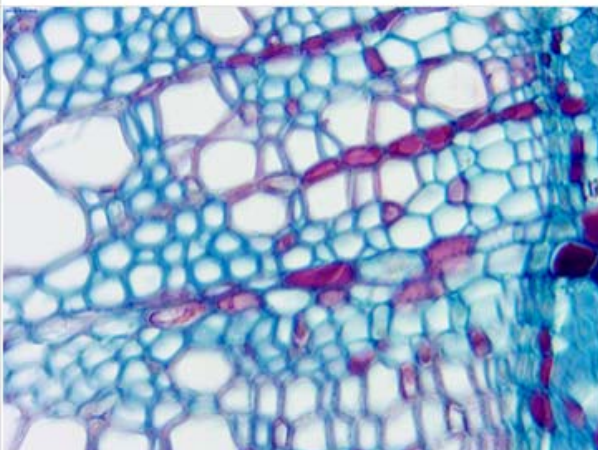
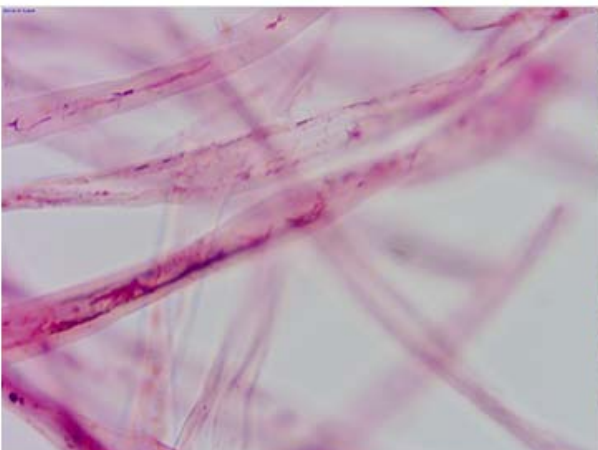
2. Penicillium W.M



17. Housefly Foot W.M

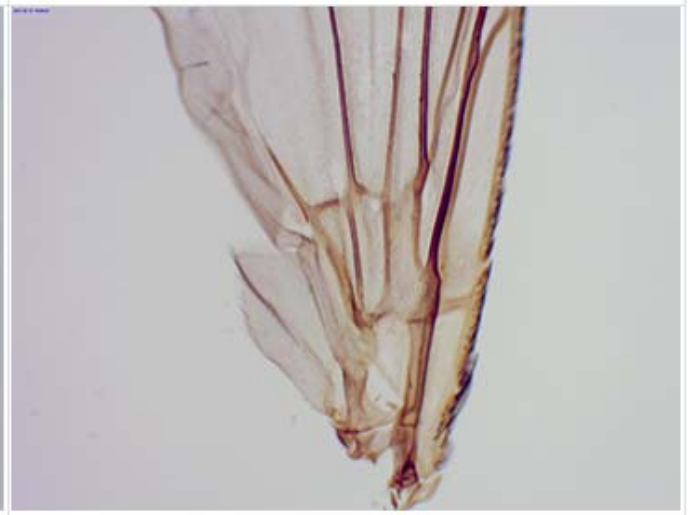


18. Blood of Frog Smear

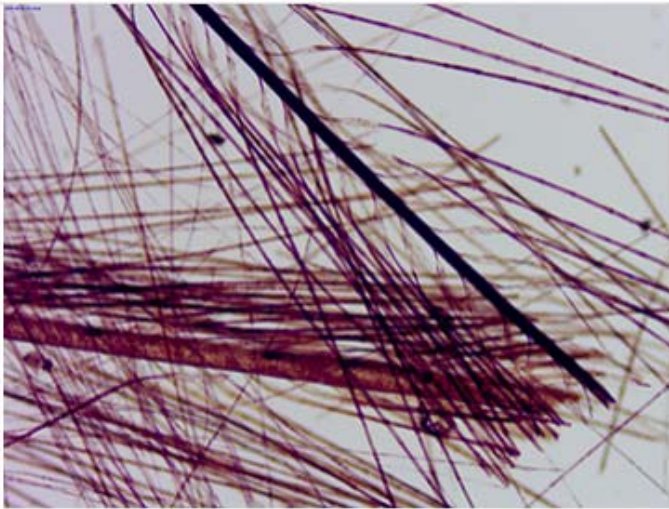




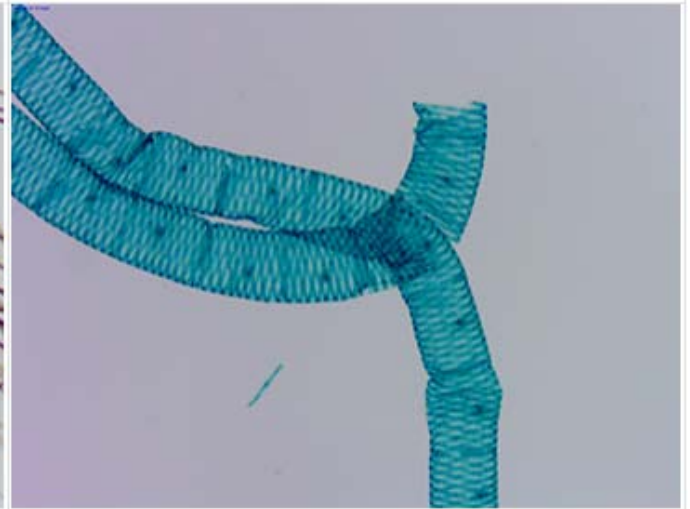
11. Pine Mature Pollen Grain



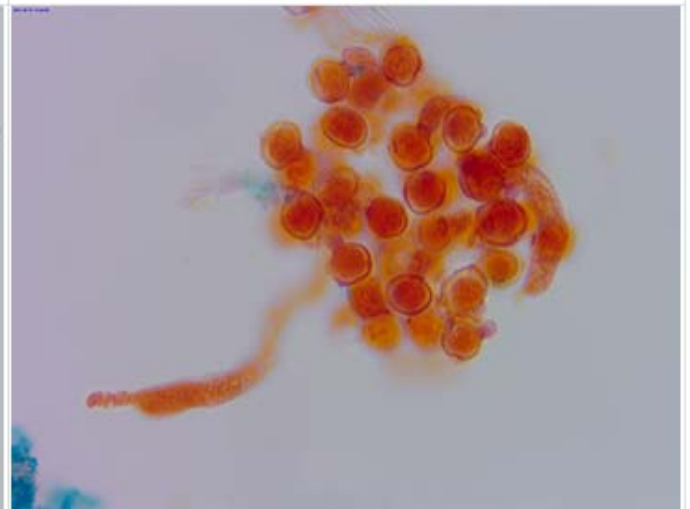
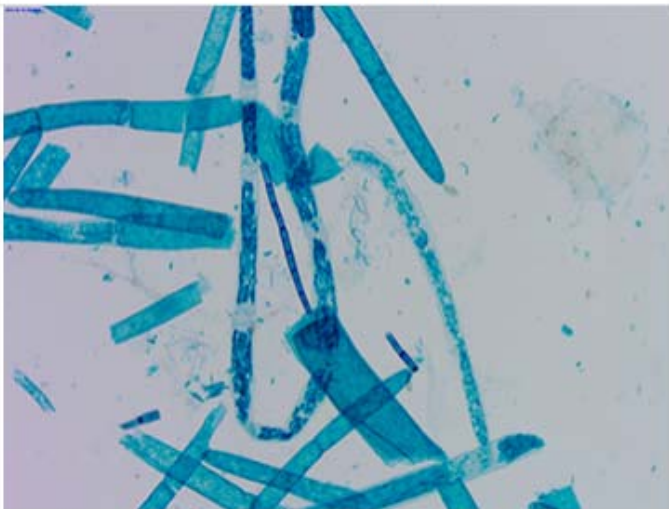
12. Housefly Wing W.M



13. Bird Feather W.M



14 Spirogyra W.M



All Images made by touptek