

Touptek USB-Camera, Series C2CMOS

C2CMOS is a standard C-Mount Camera with Sony or OnSemi sensor and USB 2.0 for data transfer.

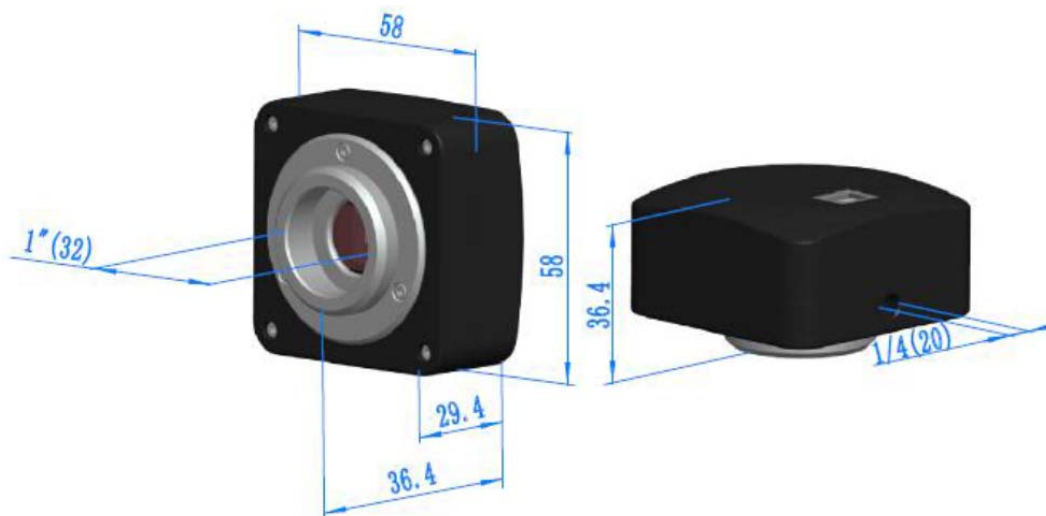
Hardware resolutions range from 2.1 to 12MPix and come with the integrated zinc aluminum alloy compact housing.



The basic characteristic of the C2CMOS cameras are as follows:

- Standard C-Mount camera with Sony or OnSemi CMOS sensor
- With hardware resolution among 2.10MP to 12MP;
- USB2.0 interface ensuring high speed data transmission;
- Integrated with large capacity memory chip ensures data synchronous transmission, low latency, high frame rate and stability;
- Compatible with Microsoft USB Video Class protocol and support the third-party software development;
- Built in Ultra-fine hardware ISP engine ensures high color restoration;
- Support automatic/manual exposure switching, accurate exposure time control, and 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;
- High performance MJPEG compression algorithm, combined with the unique decoding method of ToupView and image restoration algorithm ensure highest frame rate of USB2.0 camera in the industry. The FPS for 5MP and 8MP can be up to 30FPS; the FPS for 12MP can be up to 15FPS;
- Comply with CE and FCC agreements;
- CNC aluminum alloy housing;
- With advanced video & image processing application ToupView;
- Providing Windows/Linux/Mac OS multiple platforms SDK;
- Very competitive pricing

Sizes



Available versions:

Order Code	Sensor & Size(mm)	Pixel(μm)	G Responsivity Dynamic range SNRmax	FPS/Resolution	Binning	Exposure
C2CMOS12000KPA CP212000A	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
C2CMOS08300KPA CP208300A	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
C2CMOS05100KPA CP205100A	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
C2CMOS05100KPB CP205100B	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
C2CMOS03100KPA CP203100A	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
C2CMOS02100KPA CP202100A	2.1M/IMX307(C) 1/2.8" (5.73x4.3)	2.9x2.9	1300mV 73dB 43dB	38@1920x1080 38@1024x768	1x1 1x1	0.1-2000 ms

Other Specification for C2CMOS Camera	
Spectral Range	380-650nm (with IR-cut Filter)
White Balance	Auto/Manual/ROI White Balance/Manual Temp Tint Adjustment/NA for Monochromatic Sensor
Color Technique	Ultra-fine hardware ISP 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:USB2.0 High-speed Port
	Display:17" or Larger CD-ROM

Packing information



Standard Camera Packing List

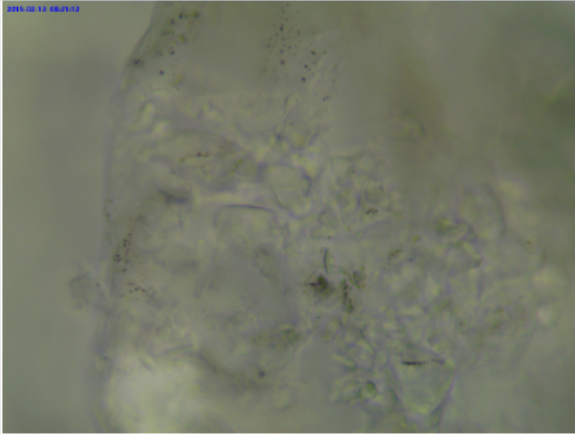
A	Carton L:52cm W:32cm H:33cm (20pcs, 12~17Kg/ carton), not shown in the photo
B	Gift box L:15cm W:15cm H:10cm (0.5~0.55Kg/ box)
C	UCMOS series USB2.0 C-mount CMOS camera
D	High-speed USB2.0 A male to B male gold-plated connectors cable /2.0m
E	CD (Driver & utilities software, Ø12cm)

Optional Accessory

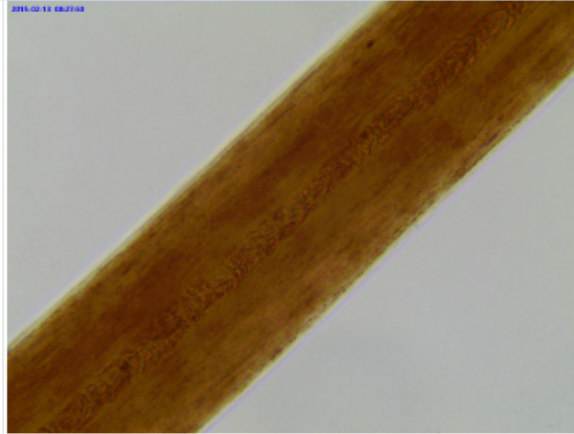
F	Adjustable lens adaptor	C-mount to Dia.23.2mm eyepiece tube (Please choose 1 of them for your microscope)	108001/AMA037 108002/AMA050 108003/AMA075
		C-mount to Dia.31.75mm eyepiece tube (Please choose 1 of them for your telescope)	108008/ATA037 108009/ATA050 108010/ATA075
G	Fixed lens adaptor	C-mount 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 adaptor 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.)	

Sample images, made by Touptek:
Sample Images 1 Captured with UA Camera(UA310CA)

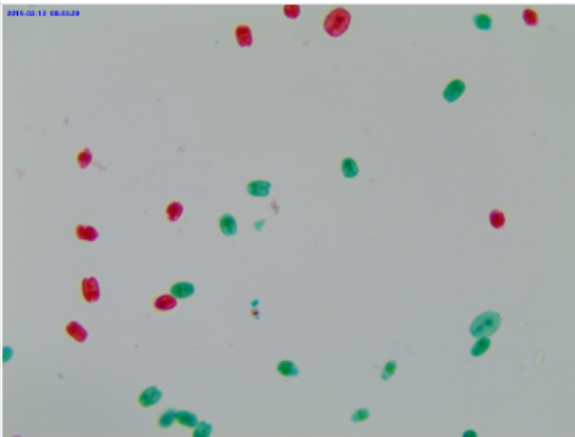
The microscope slide images are captured with TPS005050 slide(01~025) package and with UA310CA camera.



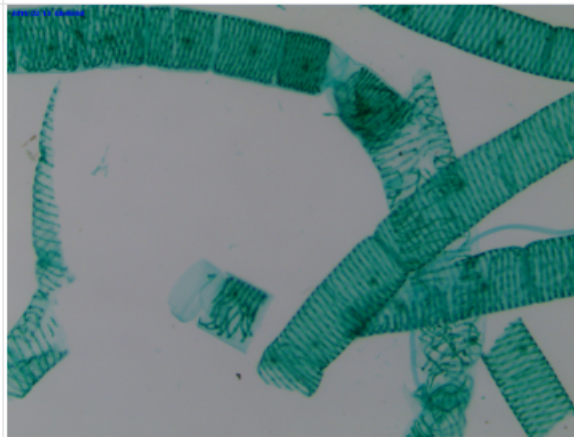
1. Sugar Crystals. W.M.



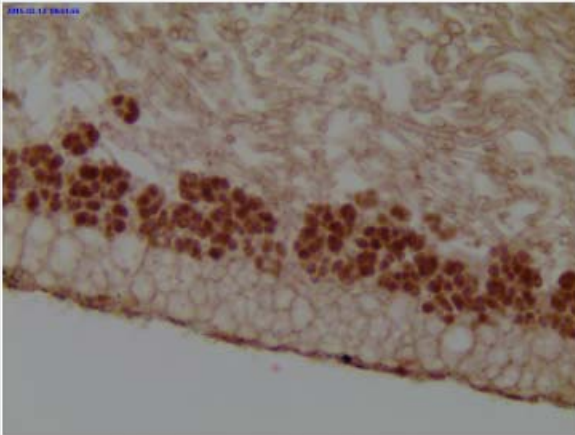
2. Comparative Hairs. Human, Sheep & Cat



3. Chlamydomonas. W.M.



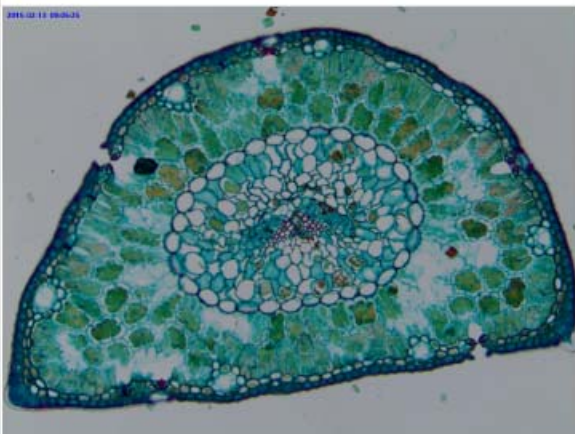
4. Spirogyra. W.M.



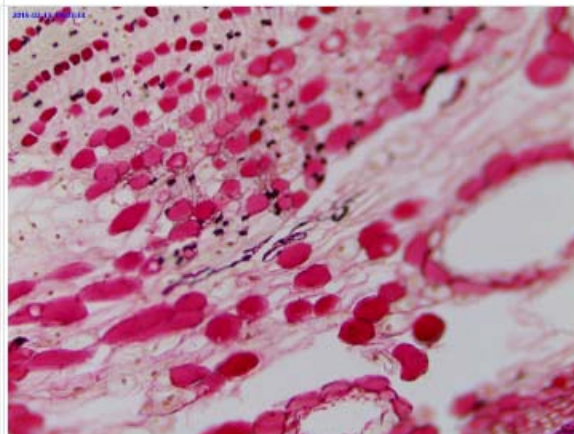
5. Lichen. Sec.



6. Fern Leaf. C.S.

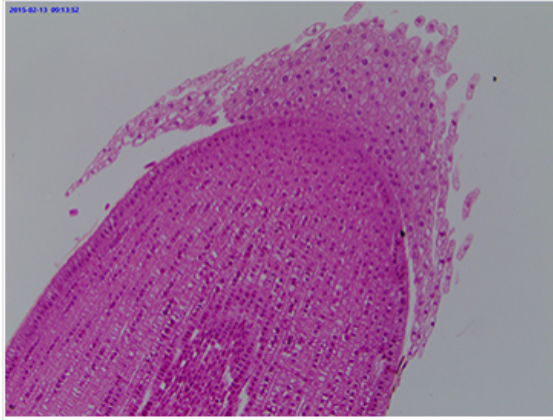


7. Pine Leaf. C.S.

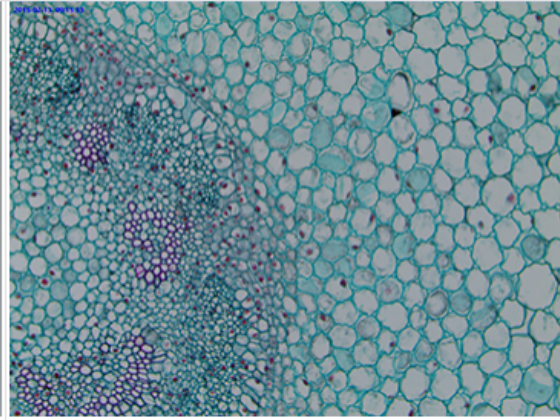


8. Ten Year Pine Stem. C.S.

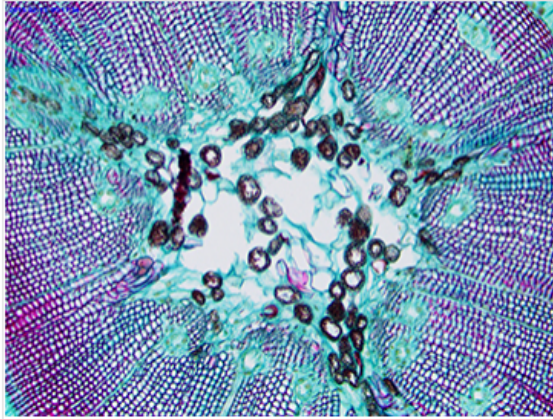
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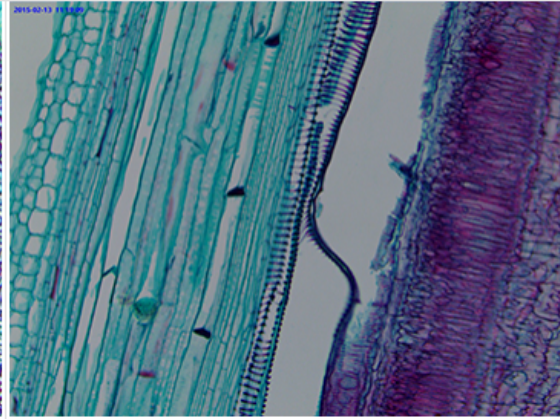
9. Corn Root Tip. L.S.



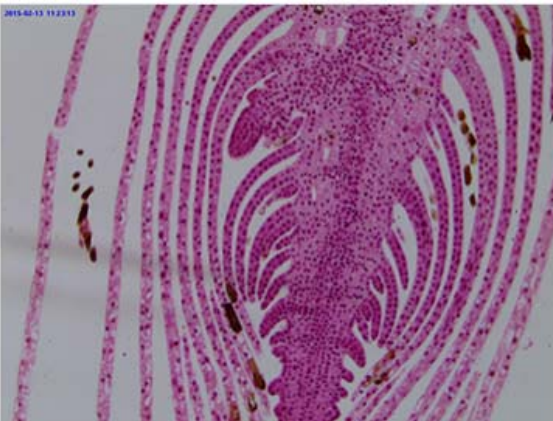
10. Broad bean Root. C.S.



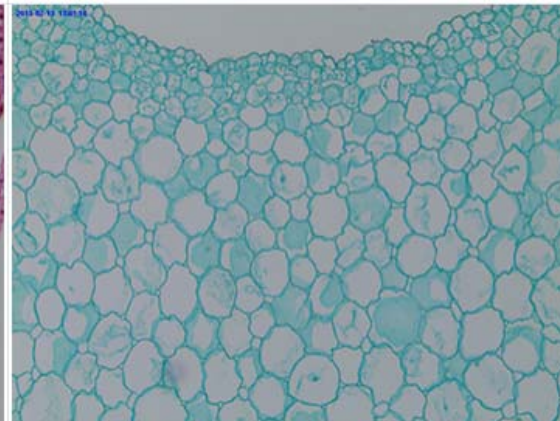
11. Corn Stem. C.S.



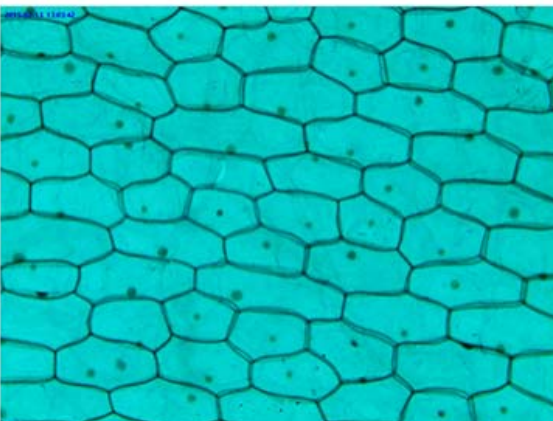
12. Cucurbit Stem. L.S.



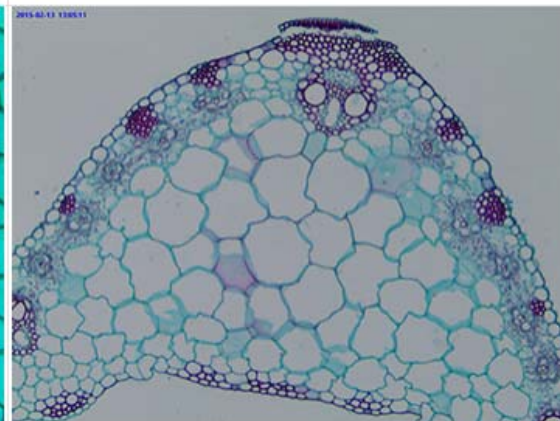
13. Top Bud. L.S.



14 Collenchyma. Sec.



15. Onion Leaf Epidermis. W.M.



16. Corn Leaf. C.S.

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