

# 11 S3CMOS Series USB3.0 Eyepiece Camera

## 11.1 S3CMOS Characteristic

- Microscope eyepiece camera with 23.2 diameter and compact size;
- Easy to extend to C or CS- Mount camera with high quality lens(optional);
- High-quality camera with Aptina CMOS sensor;
- Auto white balance and auto-exposure; Brightness, contrast, chroma, and saturation can be adjusted;
- High-speed USB3.0 interface and high frame rate video display keep the screen smooth without interruption;
- With advanced video & image processing application ToupView;
- Providing Windows/Linux/Mac OS multiple platforms SDK;
- Native C/C++, C#, DirectShow, Twain Control API;



## 11.2 S3CMOS Datasheet

S3CMOS: ToupTek S3CMOS is an economic version with simple and compact structure USB3.0 CMOS eyepiece camera. So here, the S means simple and compact. USB3.0 is used as the data transfer interface.

Microscope eyepiece camera with 23.2 diameter and compact size;

The S3CMOS eyepiece camera comes with high-speed USB3.0 interface and high frame rate video display keep the screen smooth without interruption;

Also the S3CMOS comes with advanced video & image processing application ToupView;

The S3CMOS can be widely used to transfer the mono or binocular student microscopes to digital microscope.

With 23.2 to 30mm or 23.2 to 30.75 convert ring, the S3CMOS camera can also change the stereo microscope to digital stereo microscope.

Order Code	Sensor & Size(mm)	Pixel( $\mu$ m)	G Responsivity Dynamic range SNRmax	FPS/Resolution	Binning	Exposure
S3CMOS05000KPA TP305000A	5.0/MT9P001(C) 1/2.5"(5.70x4.28)	2.2x2.2	0.53 V/lux-sec 66.5dB 40.5dB	15@2560x1920 15@2048x1536 30@1920x1080	1x1,2x2	Auto

C: Color; M: Monochrome;

### Other Specification for S3CMOS Camera

Spectral Range	380-650nm (with IR-cut Filter)
White Balance	Auto White Balance
Color Technique	N/A
Capture/Control API	Native C/C++, C#, DirectShow, Twain and Labview
Recording System	Still Picture and Movie
Cooling System*	Natural

### Operating Environment

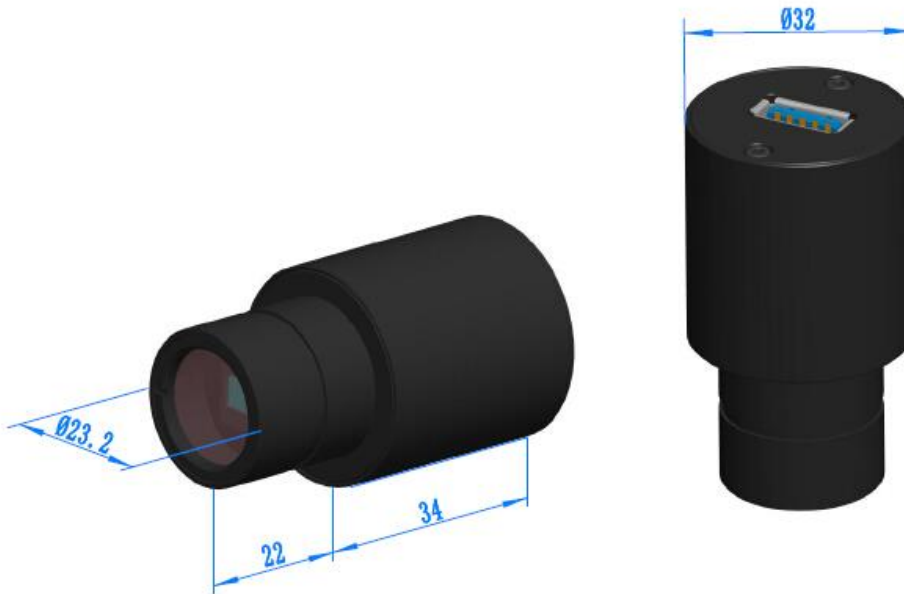
Operating Temperature(in Centidegree)	-10~ 50
Storage Temperature(in Centidegree)	-20~ 60
Operating Humidity	30~80%RH
Storage Humidity	10~60%RH
Power Supply	DC 5V over PC USB3.0 Port

### Software Environment

Operating System	Microsoft® Windows® XP / Vista / 7 / 8 (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

## 11.3 Dimension of S3CMOS Eyepiece Camera

The S3CMOS Camera body, made from aluminum alloy blackening, ocular housing: Dia.32 X 56mm ensures a heavy duty, workhorse solution. The camera is designed with a high quality IR-CUT filter to filter the infrared light and protect the camera sensor. No moving parts included. These measures ensure a rugged, robust solution with an increased lifespan when compared to other industrial camera solutions.



Drawing for S3CMOS Series Camera

## 11.4 Packing Information for S3CMOS Camera



S3CMOS Series USB3.0 CMOS Eyepiece Camera Packing Information

<b>Standard Camera Packing List</b>	
A	Carton L:52cm W:32cm H:33cm (50pcs, 12~17Kg/ carton, 0.045m <sup>3</sup> ), not shown in the photo
B	Gift box L:14.5cm W:9.5cm H:6.0cm (0.25~0.35Kg/ box)
C	S3CMOS series USB3.0 C-Mount camera
D	High-Speed USB3.0 A male to mini B 5-pin male gold-plated connectors cable /1.5m
E	CD (Driver & utilities software, Ø8cm)
<b>Optional Accessory</b>	
F	C-Mount Adapter Housing:108027(HS502)
G	108015(Dia.23.2mm to 30.0mm Ring)/Adaptor rings for 30mm eyepiece tube
H	108016(Dia.23.2mm to 30.5mm Ring)/ Adaptor rings for 30.5mm eyepiece tube
I	108017(Dia.23.2mm to 31.75mm Ring)/ Adaptor rings for 31.75mm eyepiece tube
J	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.)