

ToupTek Zoom-Microscope-Series ZOPE

The ToupTek ZOPE series is a combination of a USB camera, zoom lens and adjustable tripod with integrated LED lighting. Depending on the camera model, data is transferred via USB or HDMI. The focus is automatic, regardless of the magnification set on the zoom lens. The working distance is constant at 70 mm or 32 mm, depending on the lens

There are 2 cameras (5.1 MP color, 1.2 MP monochrome) and 2 zoom lenses (ZLA: 0.25 ~ 1.6x, ZLB: 0.7 ~ 5.6x) available

The supplied ToupView software is easy to use, (menu language German can be set) allows single images and film recordings, as well as various measurement options and image comments. The operating system is Windows / Linux / OSX, SDK; Native C / C ++, C # / VB.NET, Direct Show, Twain Control API;



Basic Characteristic of ZOPE

- The ZOPE stays in focus when magnification/focal length is changed
- True continuous zoom that most of the handheld USB microscopes do not have
- Digital microscope with USB2.0 to computer or HDMI interface to HDMI display
- Compact and professional optical performance
- With compact inner 8 high power LEDs for the reflective illumination and uniform LED transmission illumination with battery as the power
- Long and fixed working distance up to 70mm for all zoom positions
- CNC mechanical body ensure smooth zooming operation
- Wide range of resolutions from 1.2M~5M
- Ultra-Fine™ color engine with perfect color reproduction capability
- 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
- USB Power, no extra source required; Besonderheiten des ZOPE-Systems

Sizes:



Available cameras:

Order Code	Sensor & Size(mm)	Pixel(μm)	G Responsivity Dynamic range SNRmax	FPS/Resolution	Binning	Exposure(ms)
X05100KPA	5.1M/MT9P001(C) 1/2.5" (5.7x4.28)	2.2x2.2	0.53 V/lux-sec 66.5dB 40.5dB	5@2592x1944 18@1280x960 60@640x480	1x1, 2x2, 4x4	0.294ms~2000ms
X01200KPA	1.2M/AR0130(M) 1/3" (4.8x3.6)	3.75 x3.75	6.5v/lux-sec 85.3dB 44dB	28@1280x960 30@640x480	1x1, 2x2	0.4ms~2000ms

C: Color; M: Monochrome;

Other Specification for UC MOS 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:USB2.0 High-speed Port
	Display:17" or Larger
	CD-ROM

Available Zoom Optics

Model	Z1A	Z1B
Zoom Lens	0.25X~1.6X (continues and parfocal)	0.7X~5.6X(continues and parfocal)
Working Distance	67.85mm(From lens to object surface)	31.73(from lens to object surface)
MTF	Diffraction limited	Diffraction limited
Field	Φ28.8~4.5mm	Φ10.85~1.36mm
Reflection Illumination(USB power supply)	8 LEDs embedded illumination(adjustable)	8 LEDs embedded illumination(adjustable)
Transmission Illumination (Battery power, Optional)	Uniform illumination(3 levels switchable)	Uniform illumination(3 levels switchable)

Packing information and optional accessories

Standard Packing List	
A	Carton L:51cm W:31.5cm H:18cm (1pcs, 2.8Kg/ carton, 0.029m ³), not shown in the photo
B	ZOPE series digital microscope
C	Solid stand
D	Hexwrench to install the stand
E	CD (Driver & utilities software, Ø12cm)
Optional Accessory	
F	Uniform transmissive illumination kit(3 Battery power supply, 3 levels switchable)
G	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.)

Images



With Transmission Illumination



With EPI Illumination On

The above statements are based on our present knowledge. Our statements should not be interpreted as a guarantee of characteristics. The use of our products by our customers is subject to different conditions, therefore none of our customers are relieved of the responsibility of testing our products by themselves. A liability for consequential damage will not be accepted in any case. For damage resulting from the use of this information we can only be held responsible if there is evidence of malice or negligence on our part. This data-sheet replaces any previous data sheets.

ASMETEC, METODRILL, METOCHECK, METOLIGHT, METOSTAT, METOCLEAN and METO are registered trade marks of ASMETEC GmbH.
USB-CAM-ZOPE-DB-E.DOCX, VERSION APR-21