



E3IS Series C-mount USB3.0 CMOS Camera with Hardware ISP and Video Pipeline

E3ISPM adopt SONY Exmor CMOS sensor as the image-picking device and USB3.0 is used as the transfer interface. E3ISPM hardware resolutions range from 1.5M to 45M and come with the integrated CNC aluminum alloy compact housing.

E3ISPM integrated with 12 bit Ultra-fine Hardware Image Signal Processor Video Pipeline(Ultra-fine TM Hardware ISP/Video Pipeline) for Demosaic, Adjustments, Automatic Exposition, Gain Adjustment, One Push White Balance, Chrominance Adjustment, Saturation Adjustment, Gamma Correction, Luminance Adjustment, Contrast Adjustment, Bayer and finally form RAW data for 8/12 bit output. This will move the heavier burden of the processing from the PC to the Ultra-fineTM Hardware ISP/Video Pipeline and greatly accelerating the processing speed.

E3ISPM comes with advanced video & image processing application ToupView; Providing Windows/Linux/macOS/Android multiple platform SDK(Native C/C++, C#/VB.NET, Python, Java, DirectShow, Twain, etc);

The E3ISPM can be widely used in bright field light environment and microscope image capture and analysis with higher frame rate.

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- SONY Exmor Back-illuminated CMOS sensor with USB3.0 interface;
- Real-time 8/12/14/16bit depth switch(depending on sensor);
- Super high sensitivity up to 2350mV(IMX385);
- Ultra low noise and low power dissipation;
- With hardware resolution among 1.5M to 45M;
- Rolling Shutter or Global Shutter; Standard C-Mount camera; CNC aluminum alloy housing;
- With advanced video & image processing application ToupView;
- Ultra-fine Color hardware Color Engine ensuring high frame rates(Up to 15 frames for 20M Resolution);
- Windows/Linux/macOS/Android multiple platform SDK;

Related Models

Model in Stock E3IS 18MP

Order Code	Sensor & Size(mm)	Pixel(μm)	G Sensitivity Dark Signal	FPS/Resolution	Binning	Exposure
E3IS18MP	18M/SONY Special(C) 1/2.2 "(5.86x4.46)	1.2 x1.2	130mv with 1/30s 0.1mv with 1/30s	17@4880x3720 40@2448x1836 50@1728x1296	1x1 2x2 3x3	0.1ms~15s

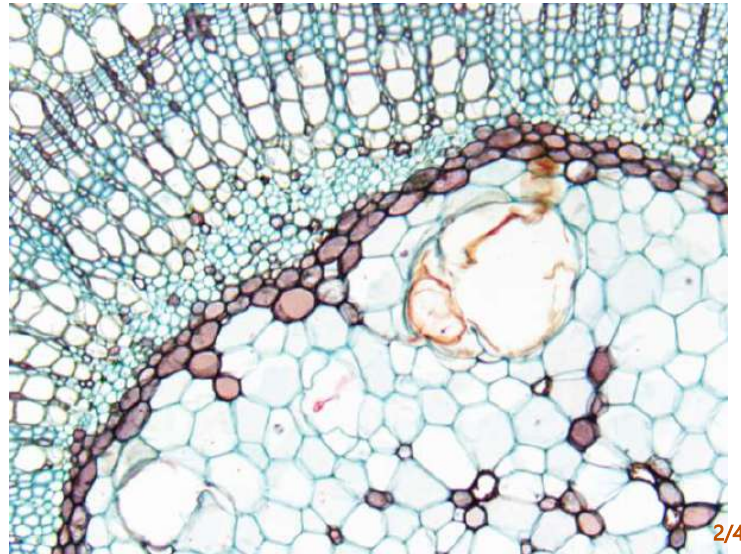
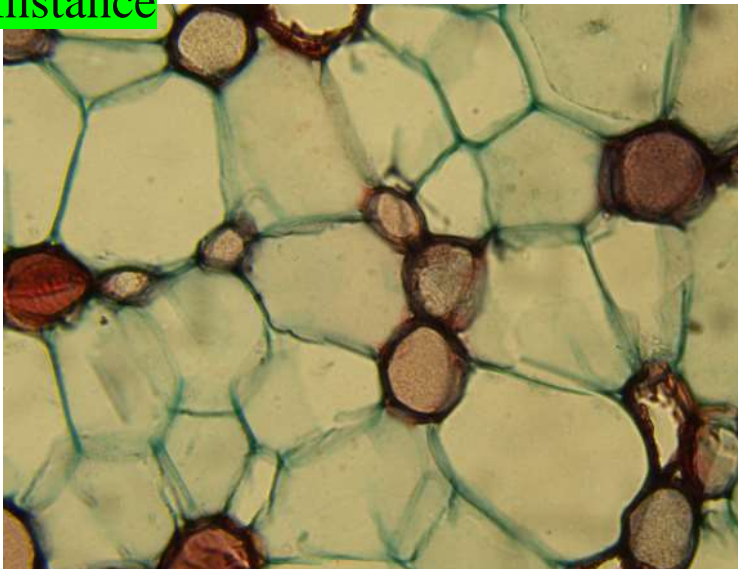
specification

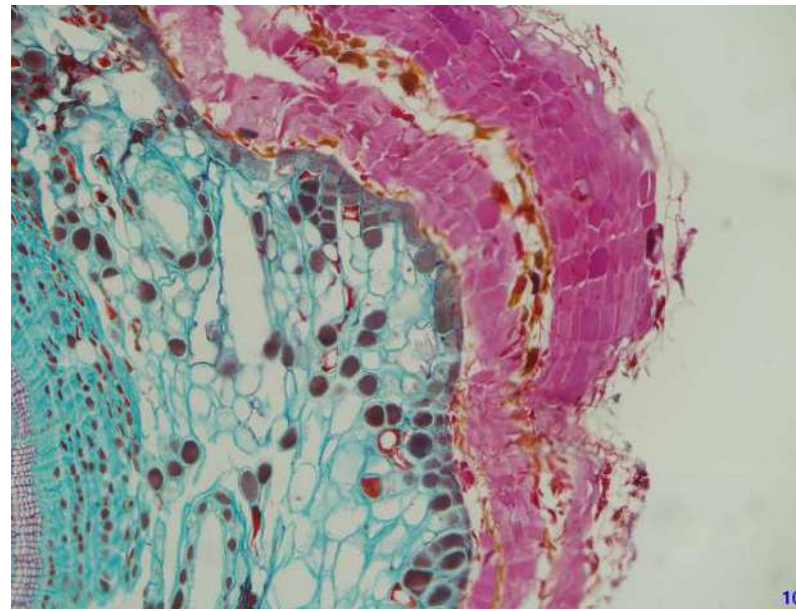
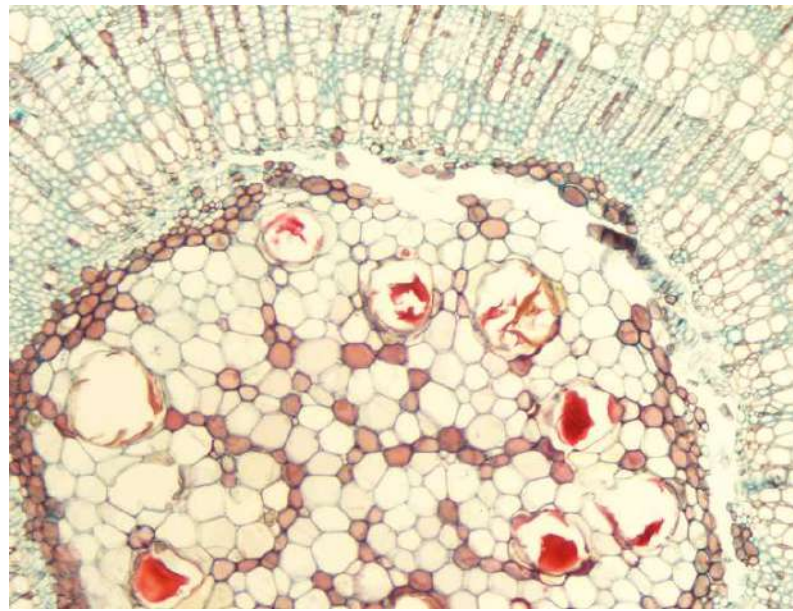
Other Specification	
Spectral Range	380-650nm (with IR-cut Filter)
White Balance	ROI White Balance/ Manual Temp Tint Adjustment/NA for Monochromatic Sensor
Color Technique	Ultra-Fine HISPVP /NA for Monochromatic Sensor
Capture/Control SDK	Windows/Linux/macOS/Android Multiple Platform SDK(Native C/C++, C#/VB.NET, Python, Java, DirectShow, Twain, etc)
ADC	8 Bit / 12 Bit
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. Compatible with USB2.0
Software Environment	
Operating System	Microsoft [®] Windows [®] XP / Vista / 7 / 8 /10 /11 (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

Applications

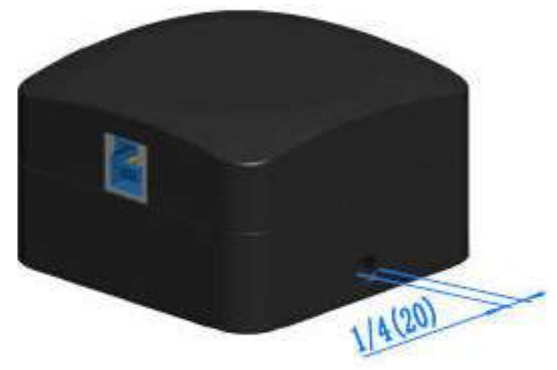
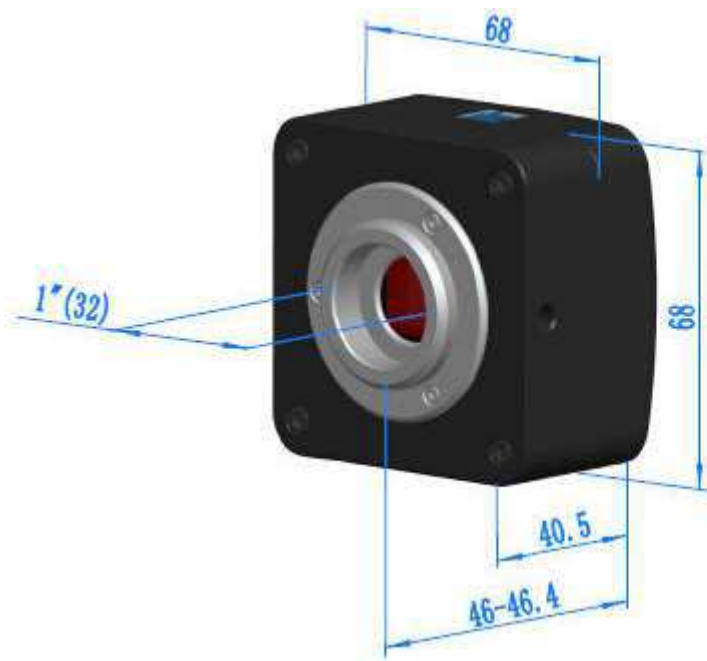
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Instance





E3ISPM Camera Dimensions



Packing List



Packing Information of E3ISPM Series

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 (0.58~0.6Kg/ box)		
C	One E3ISPM series 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 108004/AMA100
		C-mount to Dia.31.75mm eyepiece tube (Please choose 1 of them for your telescope)	108008/ATA037 108009/ATA050 108010/ATA075 108011/ATA100
G	Fixed lens adapter	C-mount to Dia.23.2mm eyepiece tube (Please choose 1 of them for your microscope)	108005/FMA037 108006/FMA050 108007/FMA075 108008/FMA100
		C-Mount to Dia.31.75mm eyepiece tube (Please choose 1 of them for your telescope)	108011/FTA037 108012/FTA050 108013/FTA075 108014/FTA100
Note: For F and G optional items, please specify your Camera type(C-mount, microscope Camera or telescope camera) , engineer will help you to determine the right microscope or telescope Camera adapter for your application;			
H	108015(Dia.23.2mm to 30.0mm ring)/Adapter rings for 30mm eyepiece tube		
I	108016(Dia.23.2mm to 30.5mm ring)/ Adapter rings for 30.5mm eyepiece tube		
J	108017(Dia.23.2mm to 31.75mm Ring)/ Adapter 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.)	

