



## A59.2222 Hdmi Usb Sd Digital Camera 2.0m - 8.0m

Our Product Introduction

for more products please visit us on [cnoec.com](http://cnoec.com)

### Basic Information

- Place of Origin: China
- Brand Name: CNOEC, OPTO-EDU
- Certification: CE, Rohs
- Model Number: A59.2222
- Minimum Order Quantity: 1 pc
- Price: FOB \$1~1000, Depend on Order Quantity
- Packaging Details: Carton Packing, For Export Transportation
- Delivery Time: 5~20 Days
- Payment Terms: T/T, West Union, Paypal
- Supply Ability: 5000 pcs/ Month

OPTO-EDU



### Product Specification

- Applications: Microscope
- Certification: CE|Rohs
- USB Mouse: Connect USB Mouse For Easy Operation On HDMI Menu
- USB Video: Connect PC Or Other Host Device To Realize Video Image Transmission
- SD: Comply With SDIO3.0 Standard And SD Card Could Be Inserted For Video And Images Saving
- LED: LED Status Indicator
- ON/OFF: Power On/Off Switch
- Highlight: **usb sd digital camera, 8.0m sd digital camera, 2.0m hdmi digital camera**

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## Product Description

A59.2222 series camera is the next-generation live-view imaging-system with 1080P resolution(Video) at 60/30 FPS. It comes with Sony Exmor CMOS sensor with high sensitivity, low dark current and no smear achieved through the adoption of R, G and B primary color mosaic filters.

The camera uses a standard C-mount interface for maximum compatibility with various microscopy-systems. It can be used as a stand-alone recorder when used with an HDMI monitor or television, or live-streamed to a PC via USB for image-capture and video-recording.

Hardware 3D denoising, sharpness and tone mapping control functions greatly improve the image and video quality.

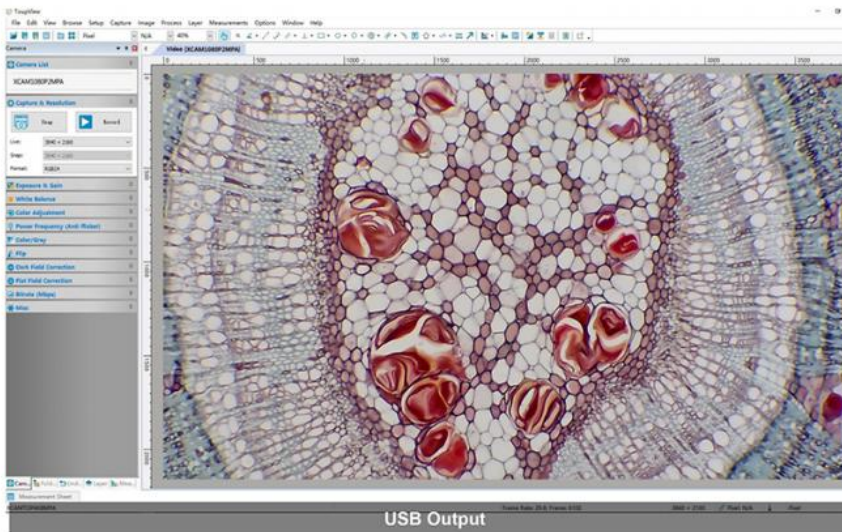
The included Windows software offers image-development and measurement tools, as well as advanced compositing features such as image-stitching and extended-depth-of-focus. With the ability to calibrate scales at multiple magnifications, the software can be used for multi-level inspection. For Mac and Linux, there is a lite version of the software which can capture video and still images, and includes limited processing features.

A59.2222 series camera is intended to be used for the acquisition of digital images from the stereo microscope, biological microscope or online interactive teaching.

- HDMI+USB+SD Digital Camera With Sony Exmor CMOS Sensors Resloution 1080p/2.0M~8.0M
- Built-in HDMI Mouse Control Panel For Image Capture & Video Record To SD Card
- Built-in Toolbar Including Zoom, Mirror, Comparison, Freeze, Cross, Browser Functions
- Ultra-Fine TM Color Engine With Perfect Color Reproduction Capability (USB)
- Advanced Video & Image Processing Software Image View, Support SDK For Win/Linux/Mac/Android



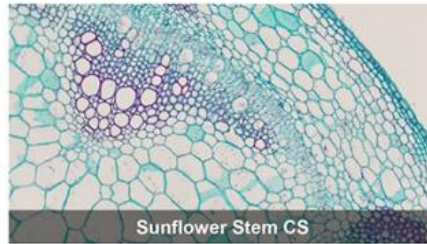
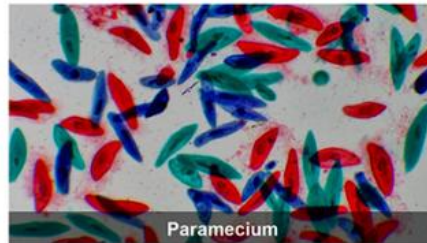
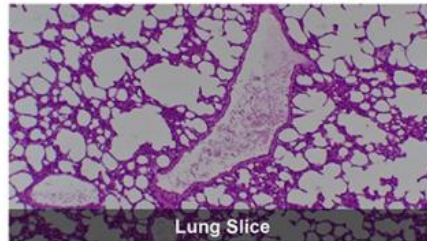
## A59.2222 Connections Image



## A59.2222 Features & Sample Pictures



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## A59.2222 Specification



	Sensor & Size(mm)	Pixel( $\mu$ m)	G Sensitivity Dark Signal	FPS/Resolution	Binning	Exposure
2MPA	Sony IMX385(C)	3.75x3.75	1175mv with 1/30s	60@1920*1080(HDMI)	1x1	0.04ms~1000ms
	1/2"(7.2x4.05)	75	0.15mv with 1/30s	50@1920*1080(USB)		
8MPB	Sony IMX415(C)	1.45x1.45	300mv with 1/30s	30@1920*1080(HDMI)	1x1	0.04ms~1000ms
	1/2.8"(5.57x3.13)	45	0.13mv with 1/30s	30@3840*2160(USB)		

Remark: C - Color, M-Monocolor, GS-GS Shutter

### INTERFACE & BUTTON FUNCTION

USB Mouse	Connect USB mouse for easy operation on HDMI menu
USB Video	Connect PC or other host device to realize video image transmission
HDMI	Comply with HDMI1.4 standard. 1080P format video output for standard monitor, Mouse Control & Measure Function
DC12V	Power adapter connection (12V/1A)

SD	Comply with SDIO3.0 standard and SD card could be inserted for video and images saving
LED	LED status indicator
ON/OFF	Power On/Off Switch
VIDEO OUTPUT INTERFACE	
HDMI Interface	Comply with HDMI1.4 standard; 60fps@1080P
USB Video Interface	Connecting USB Video port of PC for video transfer MJPEG format video
USB OUTPUT	
Video Saving	Video format:1920*1080 H264/H265 encoded MP4 file; Video saving frame rate:60fps(2MPA);30fps(8MPB)
Image Capture	2M (1920*2160, 2MPA) JPEG/TIFF image in SD card; 8M (3840*2160, 8MPB) JPEG/TIFF image in SD card;
Measurement Saving	Measurement information saved in different layer with image content Measurement information is saved together with image content in burn in mode
ISP	Exposure(Automatic, Manual Exposure), Gain, White Balance(Manual, Automatic, ROI Mode), Sharpening, 3D Denoise, Saturation Adjustment, Contrast Adjustment, Brightness Adjustment, Gamma Adjustment, Color to Gray, 50HZ/60HZ Anti-flicker Function
Image Operation	Zoom In/Zoom Out, Mirror/Flip, Freeze, Cross Line, Overlay, Embedded Files Browser, Video Playback, Measurement Function
Embedded RTC	To support accurate time on board (Optional)
Restore	Restore camera parameters to Default Factory Settings
Multiple Language	English, Simplified Chinese, Traditional Chinese, Korean, Thailand, French, German, Japanese, Italian, Russian
SOFTWARE ENVIRONMENT UNDER LAN/WLAN/USB VIDEO OUTPUT	
White Balance	Auto White Balance
Color Technique	Ultra-Fine Color Engine
Capture/Control SDK	Win/Linux/macOS/Android Multiple Platform SDK(Native C/C++, C#/VB.NET, Python, Java, DirectShow, Twain, etc)
Recording System	Still Picture or Movie
Operating System	Microsoft® Windows® XP, Vista, 7, 8, 8.1 /10 /11(32 & 64 bit) OSx(Mac OS X) Linux
PC Requirements	CPU: Equal to Intel Core2 2.8GHz or Higher Memory: 4GB or More Display:19" or Larger CD-ROM
OPERATING ENVIRONMENT	
Operating Temperature	-10 °C~ 50 °C
Storage Temperature	-20 °C~ 60 °C
Operating Humidity	30~80%RH
Storage Humidity	10~60%RH
Power Supply	DC 12V/2A Adaptor
Dimension of A59.2222 Series Camera	
A59.2222 series camera body, made from tough, CNC aluminium alloy, ensures a heavy duty, workhorse solution. The camera is designed with a high quality IR-CUT to protect the camera sensor. No moving parts included. This design ensures a rugged, robust solution with an increased lifespan when compared to other industrial camera solutions	



## A59.2222 Packing List



Packing List of A59.2222 Series Camera				
Standard Outfit				
A	Gift box : L:25.5cm W:17.0cm H:9.0cm (1pcs, 1.48Kg/ box)			
B	A59.2222 Digital Camera			
C	Power Adaptor: Input: AC 100~240V 50Hz/60Hz, Output: DC 12V 1A			
	American standard: POWER-U-12V1A(MSA-C1000IC12.0-12W-US): UL/CE/FCC			
	European standard: POWER-E-12V1A(MSA-C1000IC12.0-12W-DE): UL/CE/FCC			
	EMI standard: FCC Part 15 Subpart B EMS standard: EN61000-4-2,3,4,5,6			
D	USB Mouse			
E	HDMI Cable			
F	USB2.0 A male to A male gold-plated connectors cable /2.0m			
G	CD (Driver & utilities software, Ø12cm)			
Optional Accessory				
H	SD Card(16G or above; Speed: class 10)			
I	Focus Adjustable Eyepiece Adapter	For Microscope	0.37x, C-Mount to Dia.23.2mm	A55.2202- A37
			0.50x, C-Mount to Dia.23.2mm	A55.2202- A50
			0.75x, C-Mount to Dia.23.2mm	A55.2202- A75
		For Telescope	0.37x, C-Mount to Dia.31.75mm	A55.2204- A37
			0.50x, C-Mount to Dia.31.75mm	A55.2204- A50
			0.75x, C-Mount to Dia.31.75mm	A55.2204- A75
J	Focus Fixed Eyepiece Adapter	For Microscope	0.37x, C-Mount to Dia.23.2mm	A55.2202- F37
			0.50x, C-Mount to Dia.23.2mm	A55.2202- F50
			0.75x, C-Mount to Dia.23.2mm	A55.2202- F75
		For Telescope	0.37x, C-Mount to Dia.31.75mm	A55.2204- F37
			0.50x, C-Mount to Dia.31.75mm	A55.2204- F50
			0.75x, C-Mount to Dia.31.75mm	A55.2204- F75
K	Adaptor Rings Dia.23.2mm to 30.0mm For 30.0mm Microscope Eyepiece Tube			A55.2203- 30
L	Adaptor Rings Dia.23.2mm to 30.5mm For 30.5mm Microscope Eyepiece Tube			A55.2203- 30.5
M	Calibration Stage Micrometer	X=0.01mm/100Div.		
		X,Y=0.01mm/100Div		
		X=0.01mm/100Div., 0.10mm/100Div		

## Camera Connect To Microscope



A55.2002  
C-Mount to 23.2mm Adapter  
For Microscope

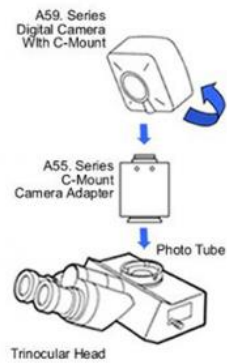


A55.2004  
C-Mount to 31.75mm Adapter  
For Telescope

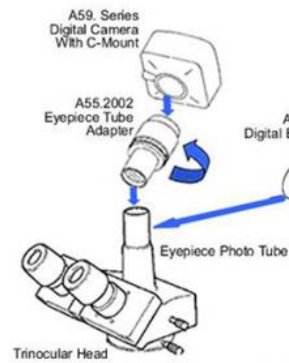
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### How Camera Connect To Microscope

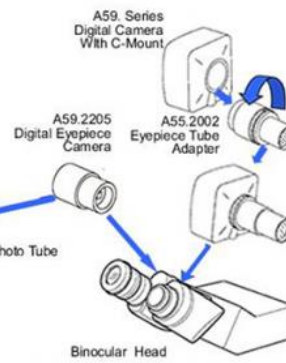
#### 1. To Trinocular Microscope On Straight Photo Tube



#### 2. To Trinocular Microscope On Eyepiece Photo Tube



#### 3. To Binocular Microscope On Eyepiece Tube



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