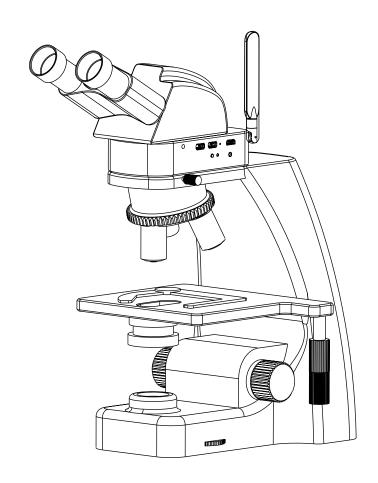


# **LANOPTIK CAMERA**

### **SOLUTIONS TO MICROSCOPES**

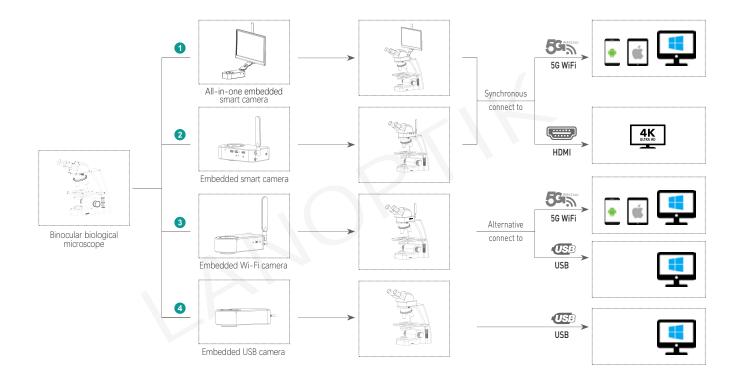


# **CONTENTS**

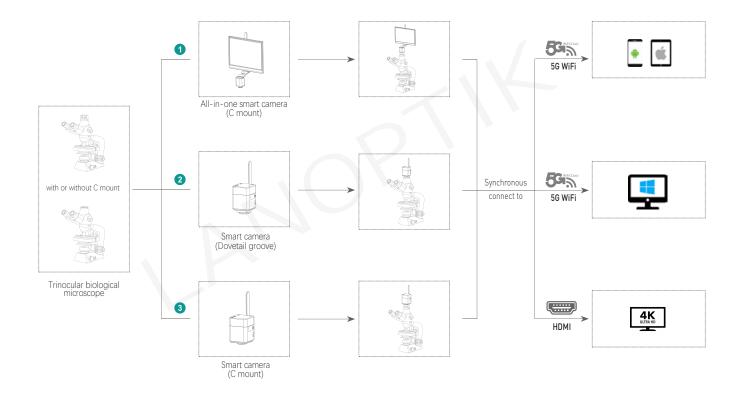
Solutions to Microscope Chart 1······	02
Solutions to Microscope Chart 2······	03
Solutions to Microscope Chart 3·····	04
Solutions to Biological Binocular Microscope	05 / 08
Solutions to Biological Trinocular Microscope	09 / 16
Solutions to Stereo Binocular Microscope	17
Solutions to Stereo Trinocular Microscope	18 / 21
Solutions to Inverted Microscope	22 /23

## Camera Solutions to Microscope (1)

#### Solutions to Biological Binocular Microscope

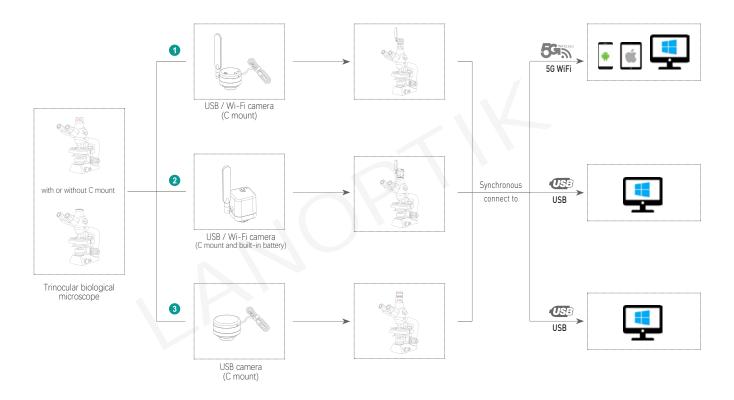


### Solutions to Biological Trinocular Microscope - Part 1

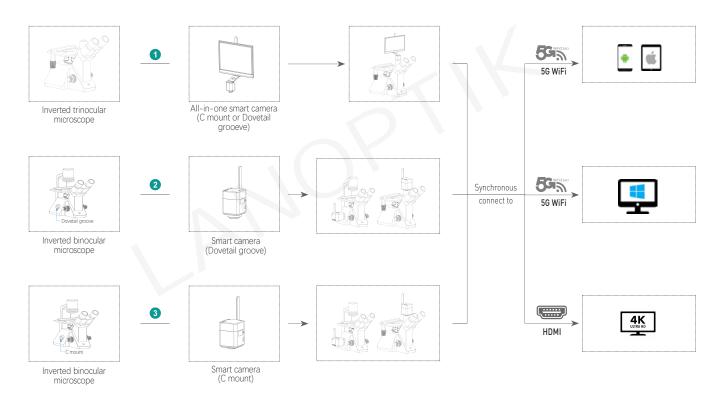


## Camera Solutions to Microscope (2)

#### Solutions to Biological Trinocular Microscope - Part 2

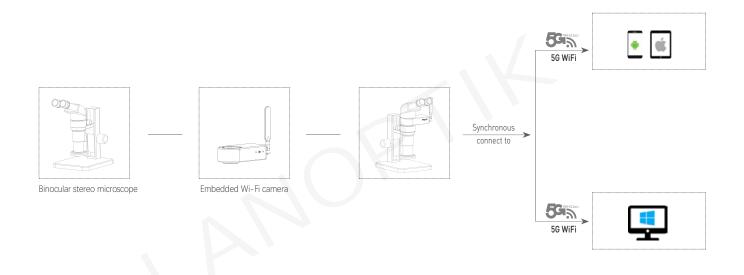


### Solutions to Inverted Microscope

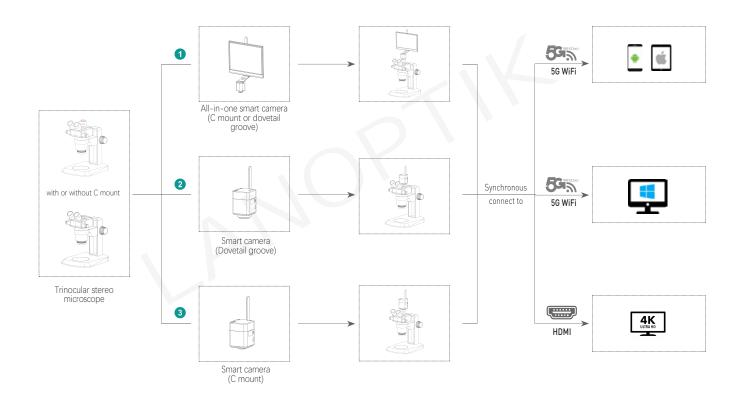


## Camera Solutions to Microscope (3)

#### Solutions to Stereo Binocular Microscope



### Solutions to Inverted Microscope



# Solution 1 for Biological Binocular Microscope

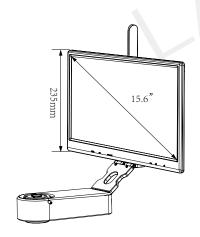
### All-in-one Embedded Smart Camera



#### Camera List

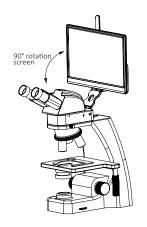
Applicable	Microscope	12.0 MP	8.0 MP	PC Software	APP	5G WiFi Output	HDMI Output	USB Output
01	CX series	HE1210	HE810				Available	N/A
Olympus	BX series	HE1210	HE810		KoPa WiFi Lab AO KoPa WiFi Lab	Available		
	Ei, Si series	HE1210-NE	HE810-NE	Pivit Pro				
Nikon	E series	11E1010 N	HE810-N					
	Ci, Ni series	HE1210-N			KOFa WITT Lab			
Carl Zeiss	Primo star	HE1210-Z	HE810-Z					
Leica	DM series	HE1210-L	HE810-L					

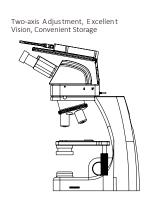
#### Specifications

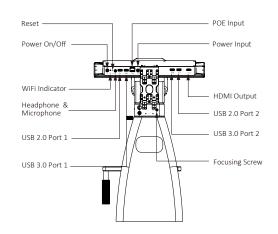


Resolution	12.0 MP	8.0 MP			
Sensor Type	Sony IMX412 CMOS	Sony IMX334 CMOS			
Shutter Type	Electronic rolling	Electronic rolling			
Max. Resolution	4000x3000 (12,000,000 pixels)	3840x2160 (8,294,400 pixels)			
Sensor Size	1/2.3 inch	1/1.8 inch			
Pixel Size	1.55 μ m x 1.55 μ m	2.0 μ m x 2.0 μ m			
Spectral Response	ectral Response 380~650nm				
Exposure	Realtime Automatic, Single Autom	natic, Manual			
White Balance	Realtime Automatic, Manual				
Frame Rate	4000x3000 @25fps	3840x2160 @25fps			
Record Format	Image Capture Format: JPG Resolution: 4000x3000 Video Record Format: MOV Resolution: 1920x1080@25fps	Image Capture Format: JPG Resolution: 3840x2160 Video Record Format: MOV Resolution: 1920x1080@25fps			
Power Consumption	DC 12V 5A				
HDMI Output	Auto-adaptive dispaly, up to 3840:	x2160 P30			
WiFi Protocol	5G WiFi IEEE 802.11ac				
Working Frequency	5.180~5.825GHz				

- · Perfect compatibility with major operating systems: Windows, iOS and Android
- · 15.6-inch full color gamut, 1080P HD display, built-in intelligent operating system and APP
- · Embedded 50%:50% light splitting design, without damaging the original optical system
- · Built-in high power reduction lens for large field of view
- · Precise and simple focus of screw rod, realizing the synchronization of eyepiece and electronic imaging
- 32GB RAM, support U-disk to export picture and video data. 1080p HDMI output to display, TV, projector
- · USB interface connects mouse and keyboard for convenient measurement and text input
- · Mobile phone and tablet scan exclusive QR code wireless point-to-point connection expansion screen Connect to PC through WiFi







# Solution 2 for Binocular Biological Microscope

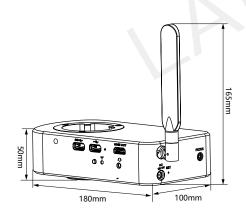
### Embedded Smart Camera

#### Camera List



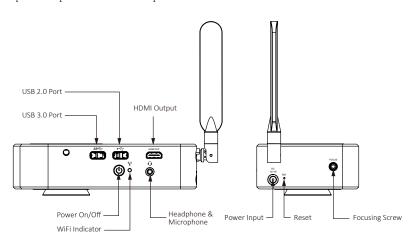
Applicable	Microscope	12.0 MP	8.0 MP	PC Software	APP	5G WiFi Output	HDMI Output	USB Output
01	CX series	TE1200	TEOOO	Pivit Pro		Available	Available	N/A
Olympus	Olympus BX series	TE1200	1 E800		KoPa WiFi Lab AO KoPa WiFi Lab			
	Ei, Si series	TE1200-NE	TE800-NE					
Nikon	E series	TE1200-N	TE800-N					
	Ci, Ni series	1E1200-IN						
Carl Zeiss	Primo star	TE1200-Z	TE800-Z					
Leica	DM series	TE1200-L	TE800-L					

#### Specifications



Resolution	12.0 MP	8.0 MP				
Sensor Type	Sony IMX412 CMOS	Sony IMX334 CMOS				
Shutter Type	Electronic rolling	Electronic rolling				
Max. Resolution	4000x3000 (12,000,000 pixels)	3840x2160 (8,294,400 pixels)				
Sensor Size	1/2.3 inch	1/1.8 inch				
Pixel Size	1.55 μ m x 1.55 μ m	2.0 μ m x 2.0 μ m				
Spectral Response	380~650nm					
Exposure	Realtime Automatic, Single Auto	matic, Manual				
White Balance	Realtime Automatic, Manual					
Frame Rate	4000x3000 @25fps	3840x2160 @25fps				
Record Format	Image Capture Format: JPG Resolution: 4000x3000 Video Record Format: MOV Resolution: 1920x1080@25fps	Image Capture Format: JPG Resolution: 3840x2160 Video Record Format: MOV Resolution: 1920x1080@25fps				
Power Consumption	DC 12V 5A					
HDMI Output	Auto-adaptive dispaly, up to 384	0x2160 P30				
WiFi Protocol	5G WiFi IEEE 802.11ac					
Working Frequency	5.180~5.825GHz	5.180~5.825GHz				

- · Perfect compatibility with major operating systems: Windows, iOS and Android
- · Built-in deeply customized operating system, coming with imaging APP, automatically display camera image after power on Built-in high-power reduction lens for large field of view
- · Accurate and simple focusing with screw rod, to realize parfocality
- · 32 GB RAM, support USB flash disk to export picture and video
- · 4K resolution HDMI output to monitor, TV, projector
- USB interface connects mouse and keyboard for convenient measurement and text input
- Mobile phone and tablet scan exclusive QR code wireless point-to-point connection expansion screen
- · Connect to PC through WiFi



# 

### 5G WiFi Embedded Camera



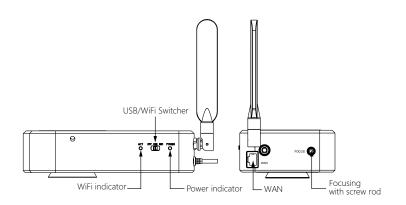
#### Camera List

Applicable	Microscope	12.0 MP	8.0 MP	PC Software	APP	5G WiFi Output	HDMI Output	USB Output
01	CX series	/	CA800					
Olympus	BX series	CA1200-BX	CA800-BX					
	Ei, Si series	Ei, Si series CA1200-NE CA800-NE	IV D 147'B' 1 1 4 0					
Nikon	E series	/	CA800-N	Pixit Pro	KoPa WiFi Lab AO KoPa WiFi Lab	Available	Available	N/A
	Ci, Ni series	CA1200-NK	CA800-NK					
Carl Zeiss	Primo star	CA1200-Z	CA800-Z					
Leica	DM series	CA1200-L	CA800-L					

#### Specifications

Resolution	12.0 MP	8.0 MP		
Sensor Type	Sony IMX412 CMOS	Sony IMX334 CMOS		
Shutter Type	Electronic rolling	Electronic rolling		
Max. Resolution	4000x3000 (12,000,000 pixels)	3840x2160 (8,294,400 pixels)		
Sensor Size	1/2.3 inch	1/1.8 inch		
Pixel Size	1.55 μ m x 1.55 μ m	2.0 μ m x 2.0 μ m		
Spectral Response	380~650nm			
Exposure	Realtime Automatic, Single Autom	atic, Manual		
White Balance	Realtime Automatic, Manual			
Frame Rate	4000x3000 @30fps	3840x2160 @30fps		
Record Format	Image Capture Format: JPG Resolution: 4000x3000 Video Record Format: MOV Resolution: 1920x1080@30fps	Image Capture Format: JPG Resolution: 3840x2160 Video Record Format: MOV Resolution: 1920x1080@30fps		
Power Consumption	USB mode: DC 5V 500mA; WiFi n	node: DC 5V 1500mA		
WiFi Protocol	5G WiFi IEEE 802.11ac			
Working Frequency	5.180~5.825GHz			

- · Perfect compatibility with major operating systems: Windows, iOS and Android
- · Alternative through WiFi or USB to connect to PC directly
- · Embedded 50%:50% light splitting design, without damaging the original optical system
- · Built-in high-power reduction lens for large field of view
- · Accurate and simple focusing with screw rod, to realize parfocality
- Mobile phone and tablet scan exclusive QR code wireless point-to-point connection expansion screen
- Support any PC or smart device connection within the same LAN, viewing the microscope at the same time access to the network
- Support cross-area (different floor) viewing of the microscope while accessing the network
- Provide WAN port connects to a router



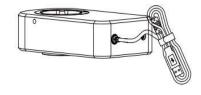
### USB Embedded Camera



#### Camera List

Applicable	Microscope	12.0 MP	8.0 MP	PC Software	APP	5G WiFi Output	HDMI Output	USB Output					
Olympus	CX series	/	HC4K										
	BX series	/	HC4K-BX										
	Ei, Si series	/	HC4K-NE										
Nikon	E series	/	HC4K-N	Pixit Pro	N/A	N/A	N/A	Avaiable					
	Ci, Ni series	/	HC4K-NK										
Carl Zeiss	Primo star	/	/										
Leica	DM series	/	HC4K-L										

#### Specifications



Resolution	8.0 MP
Sensor Type	Sony IMX334 CMOS
Shutter Type	Electronic rolling
Max. Resolution	3840x2160 (8,294,400 pixels)
Sensor Size	1/1.8 inch
Pixel Size	2.0 μ m x 2.0 μ m
Dynamic Range	72 dB
SNR	≥ 56 dB
Spectral Response	380~650nm
Exposure	Realtime Automatic, Single Automatic, Manual
White Balance	Realtime Automatic, Manual
Frame Rate	3840x2160 @30fps
Record Format	Image Capture Format: JPG Resolution: 3840x2160 Video Record Format: MOV Resolution: 1920x1080@30fps

- · USB high speed video transmission up to 30 fps at 8.3-megapixel resolution
- · Excellent auto white balance and color reduction
- · Driver-free installation and plug and play
- Pixit Pro software with measurement and image processing tools
- Embedded 50%:50% light splitting design, without damaging the original optical system
- Built-in high-power reduction lens for large field of view
- Accurate and simple focusing with screw rod, to realize parfocality



# Solution 1 for Biological Trinocular Microscope

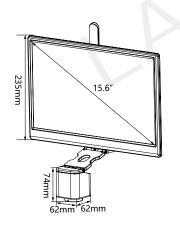
### All-in-one Smart Camera (Dovetail)



#### Camera List

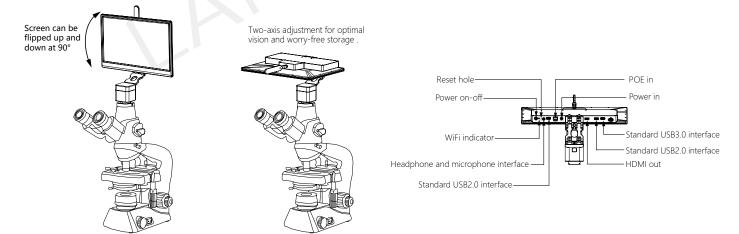
Applicable Microscope	12.0 MP	8.0 MP	PC Software	APP	5G WiFi Output	HDMI Output	USB Output
Olympus Trinocular	JX1200-O	JX800-O	D' '( D	KoPa WiFi Lab AO	A .1.1.1.	A .1.1.1.	27/4
Nikon Trinocular	JX1200-N	JX800-N	Pixit Pro	KoPa WiFi Lab	Avaiable	Avaiable	N/A

#### Specifications



Resolution	12.0 MP	8.0 MP				
Sensor Type	Sony IMX412 CMOS	Sony IMX334 CMOS				
Shutter Type	Electronic rolling	Electronic rolling				
Max. Resolution	4000x3000 (12,000,000 pixels)	3840x2160 (8,294,400 pixels)				
Sensor Size	1/2.3 inch	1/1.8 inch				
Pixel Size	1.55 μ m x 1.55 μ m	2.0 μ m x 2.0 μ m				
Spectral Response	380~650nm					
Exposure	Realtime Automatic, Single Autor	matic, Manual				
White Balance	Realtime Automatic, Manual					
Frame Rate	4000x3000 @25fps	3840x2160 @25fps				
Record Format	Image Capture Format: JPG Resolution: 4000x3000 Video Record Format: MOV Resolution: 1920x1080@25fps	Image Capture Format: JPG Resolution: 3840x2160 Video Record Format: MOV Resolution: 1920x1080@25fps				
Power Consumption	DC 12V 5A					
HDMI Output	Auto-adaptive dispaly, up to 3840	0x2160 P30				
WiFi Protocol	5G WiFi IEEE 802.11ac					
Working Frequency	5.180~5.825GHz					

- · Perfect compatibility with major operating systems: Windows, iOS and Android
- · Equipped with an all-in-one 15.6-inch 100% color gamut and 1080P HD screen
- · Built-in deeply customized operating system coming with imaging APP, automatically display camera image after power on
- · 32GB RAM, support USB flash disk to export picture, video data
- · 4K HDMI output to monitor, TV, and projector
- · USB interface connects mouse and keyboard for convenient measurement and text input
- · Mobile phone and tablet scan exclusive QR code wireless point-to-point connection expansion screen



# Solution 2 for Biological Trinocular Microscope

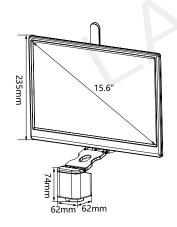
### All-in-one Smart Camera (C-mount)



#### Camera List

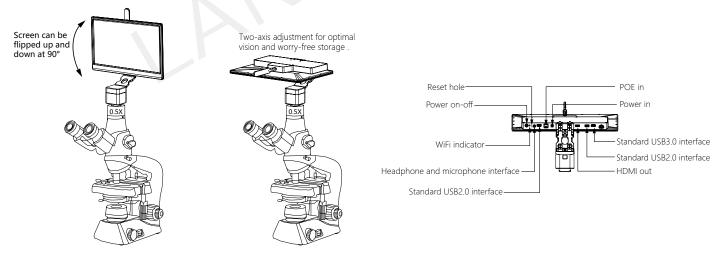
Applicable Microscope	12.0 MP	8.0 MP	PC Software	APP	5G WiFi Output	HDMI Output	USB Output
Standard C Mount	JX1200	JX800	Pixit Pro	KoPa WiFi Lab AO KoPa WiFi Lab	Avaiable	Avaiable	N/A

#### Specifications



Resolution	12.0 MP	8.0 MP				
Sensor Type	Sony IMX412 CMOS	Sony IMX334 CMOS				
Shutter Type	Electronic rolling	Electronic rolling				
Max. Resolution	4000x3000 (12,000,000 pixels)	3840x2160 (8,294,400 pixels)				
Sensor Size	1/2.3 inch	1/1.8 inch				
Pixel Size	1.55 μ m x 1.55 μ m	2.0 μ m x 2.0 μ m				
Spectral Response	380~650nm					
Exposure	Realtime Automatic, Single Automatic, Manual					
White Balance	Realtime Automatic, Manual					
Frame Rate	4000x3000 @25fps	3840x2160 @25fps				
Record Format	Image Capture Format: JPG Resolution: 4000x3000 Video Record Format: MOV Resolution: 1920x1080@25fps  Image Capture Format: JPG Resolution: 3840x2160 Video Record Format: MOV Resolution: 1920x1080@25fps					
Power Consumption	DC 12V 5A					
HDMI Output	Auto-adaptive dispaly, up to 3840:	Auto-adaptive dispaly, up to 3840x2160 P30				
WiFi Protocol	5G WiFi IEEE 802.11ac					
Working Frequency	Vorking Frequency 5.180~5.825GHz					

- · Perfect compatibility with major operating systems: Windows, iOS and Android
- · Equipped with an all-in-one 15.6-inch 100% color gamut and 1080P HD screen
- · Built-in deeply customized operating system coming with imaging APP, automatically display camera image after power on
- · 32GB RAM, support USB flash disk to export picture, video data
- · 4K HDMI output to monitor, TV, and projector
- · USB interface connects mouse and keyboard for convenient measurement and text input
- · Mobile phone and tablet scan exclusive QR code wireless point-to-point connection expansion screen



# Solution 3 for Biological Trinocular Microscope

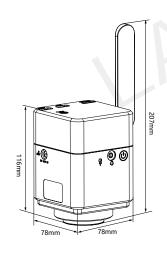
## Embedded Smart Camera (Dovetail)



#### Camera List

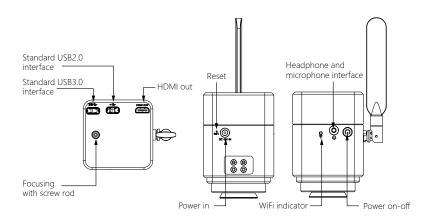
Applicable Microscope	12.0 MP	8.0 MP	PC Software	APP	5G WiFi Output	HDMI Output	USB Output
Olympus Trinocular	HW1200Z-O	/	Divit Due	KoPa WiFi Lab AO	Avaiable	A : - l- l -	NT/A
Nikon Trinocular	HW1200Z-N	/	Pixit Pro	KoPa WiFi Lab	Avaiable	Avaiable	N/A

#### Specifications



Resolution	12.0 MP
Sensor Type	Sony IMX412 CMOS
Shutter Type	Electronic rolling
Max. Resolution	4000x3000 (12,000,000 pixels)
Sensor Size	1/2.3 inch
Pixel Size	1.55 μ m x 1.55 μ m
Spectral Response	380~650nm
Exposure	Realtime Automatic, Single Automatic, Manual
White Balance	Realtime Automatic, Manual
Frame Rate	4000x3000 @25fps
Record Format	Image Capture Format: JPG Resolution: 4000x3000 Video Record Format: MOV Resolution: 1920x1080@25fps
Power Consumption	DC 12V 3A
HDMI Output	Auto-adaptive dispaly, up to 3840x2160 P30
WiFi Protocol	5G WiFi IEEE 802.11ac
Working Frequency	5.180~5.825GHz

- · Perfect compatibility with major operating systems: Windows, iOS and Android
- · Built-in deeply customized operating system
- · Comes with imaging APP, automatically display camera image after power on
- · Accurate and simple focusing with screw rod, to realize parfocality
- · 32 GB RAM, support USB flash disk to export picture and video
- · 4K HDMI output to monitor, TV, and projector
- · USB interface connects mouse and keyboard for convenient measurement and text input
- · Mobile phone and tablet scan exclusive QR code wireless point-to-point connection expansion screen



# Solution 4 for Biological Trinocular Microscope

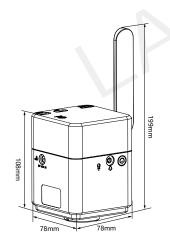
## Embedded Smart Camera (C-mount)



#### Camera List

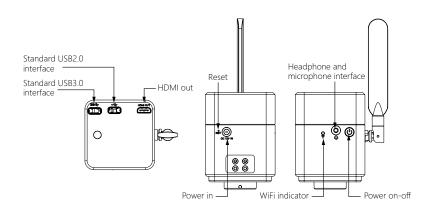
Applicable Microscope	12.0 MP	8.0 MP	PC Software	APP	5G WiFi Output	HDMI Output	USB Output
Standard C Mount	HW1200-Z	/	Pixit Pro	KoPa WiFi Lab AO KoPa WiFi Lab	Avaiable	Avaiable	N/A

#### Specifications



Resolution	12.0 MP
Sensor Type	Sony IMX412 CMOS
Shutter Type	Electronic rolling
Max. Resolution	4000x3000 (12,000,000 pixels)
Sensor Size	1/2.3 inch
Pixel Size	1.55 μ m x 1.55 μ m
Spectral Response	380~650nm
Exposure	Realtime Automatic, Single Automatic, Manual
White Balance	Realtime Automatic, Manual
Frame Rate	4000x3000 @25fps
Record Format	Image Capture Format: JPG Resolution: 4000x3000 Video Record Format: MOV Resolution: 1920x1080@25fps
Power Consumption	DC 12V 3A
HDMI Output	Auto-adaptive dispaly, up to 3840x2160 P30
WiFi Protocol	5G WiFi IEEE 802.11ac
Working Frequency	5.180~5.825GHz

- · Perfect compatibility with major operating systems: Windows, iOS and Android
- · Built-in deeply customized operating system
- · Comes with imaging APP, automatically display camera image after power on
- · Accurate and simple focusing with screw rod, to realize parfocality
- · 32 GB RAM, support USB flash disk to export picture and video
- · 4K HDMI output to monitor, TV, and projector
- · USB interface connects mouse and keyboard for convenient measurement and text input
- · Mobile phone and tablet scan exclusive QR code wireless point-to-point connection expansion screen



# Solution 1 for Biological Trinocular Microscope

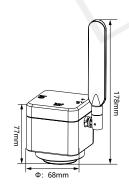
## 5G WiFi / USB Camera (Dovetail)



#### Camera List

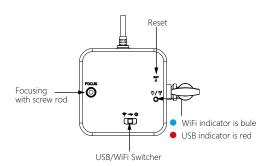
Applicable Microscope	12.0 MP	8.0 MP	PC Software	APP	5G WiFi Output	HDMI Output	USB Output
Olympus Trinocular	MC12W-O	MC4KW-O	Pixit Pro			27/4	
Nikon Trinocular	MC12W-N	MC4KW-N		KoPa WiFi Lab	Avaiable	N/A	Available

#### Specifications



Resolution	12.0 MP	8.0 MP		
Sensor Type	Sony IMX412 CMOS	Sony IMX334 CMOS		
Shutter Type	Electronic rolling	Electronic rolling		
Max. Resolution	4000x3000 (12,000,000 pixels)	3840x2160 (8,294,400 pixels)		
Sensor Size	1/2.3 inch	1/1.8 inch		
Pixel Size	1.55 μ m x 1.55 μ m	2.0 μ m x 2.0 μ m		
Spectral Response	380~650nm			
Exposure	Realtime Automatic, Single Autor	natic, Manual		
White Balance	Realtime Automatic, Manual			
Frame Rate	USB mode: 30fps	USB mode: 30fps		
riaille Kale	WiFi mode: 30fps	WiFi mode: 30fps		
Record Format	Image Capture Format: JPG Resolution: 4000x3000 Video Record Format: MOV Resolution: 1920X1080@30fps	Image Capture Format: JPG Resolution: 3840x2160 Video Record Format: MOV Resolution: 1920X1080@30fps		
Power Consumption	USB mode: DC 5V 500mA; WiFi mode: DC 5V 1500mA			
WiFi Protocol	5G WiFi IEEE 802.11ac			
Working Frequency	5.180~5.825GHz			

- · Perfect compatibility with major operating systems: Windows, iOS and Android
- · Alternative through WiFi or USB connects to PC directly
- Built-in high power reduction lens for large field of view
- · Accurate and simple focusing with screw rod, to realize parfocality
- · Mobile phone and tablet scan exclusive QR code wireless point-to-point connection expansion screen



# 

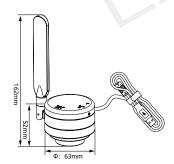
## 5G WiFi / USB Camera (C-mount)



#### Camera List

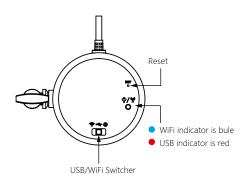
Applicable Microscope	8.0 MP	5.0 MP	PC Software	APP	5G WiFi Output	HDMI Output	USB Output
Standard C Mount	MC4KW-G1	MC500W-G1	Pixit Pro	KoPa WiFi Lab	Avaiable	N/A	Available

#### Specifications



Resolution	5.0 MP	8.0 MP			
Sensor Type	OnSemi AR0521 CMOS	Sony IMX334 CMOS			
Shutter Type	Electronic rolling	Electronic rolling			
Max. Resolution	2595X1944 (5,038,848 pixels)	3840x2160 (8,294,400 pixels)			
Sensor Size	1/2.5 inch	1/1.8 inch			
Pixel Size	2.2 μ m x 2.2 μ m	2.0 μ m x 2.0 μ m			
Spectral Response	380~650nm				
Exposure	Realtime Automatic, Single Autor	matic, Manual			
White Balance	Realtime Automatic, Manual				
Frame Rate	30 fps	30 fps			
Record Format	Image Capture Format: JPG Resolution: 2592x1944 Video Record Format: MOV Resolution: 1920x1080@30fps  Image Capture Format: JPG Resolution: 3840x2160 Video Record Format: MOV Resolution: 1920x1080@30fps Resolution: 1920x1080@3				
Power Consumption	USB mode: DC 5V 500mA; WiFi	USB mode: DC 5V 500mA; WiFi mode: DC 5V 1500mA			
WiFi Protocol	5G WiFi IEEE 802.11ac				
Working Frequency	5.180~5.825GHz				

- · Perfect compatibility with major operating systems: Windows, iOS and Android
- · Alternative through WiFi or USB connects to PC directly
- $\cdot \ \, \text{Mobile phone and tablet scan exclusive QR code wireless point-to-point connection expansion screen}$



# Solution 3 for Biological Trinocular Microscope

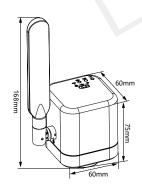
### 5G WiFi / USB Camera (C-mount & Built-in Battery)



#### Camera List

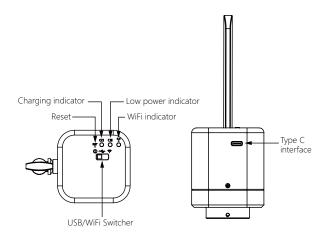
Applicable Microscope	8.0 MP	5.0 MP	PC Software	APP	5G WiFi Output	HDMI Output	USB Output
Standard C Mount	MC4KW-G2	MC500W-G2	Pixit Pro	KoPa WiFi Lab	Avaiable	N/A	Available

#### Specifications



Resolution	5.0 MP	8.0 MP			
Sensor Type	OnSemi AR0521 CMOS	Sony IMX334 CMOS			
Shutter Type	Electronic rolling	Electronic rolling			
Max. Resolution	2595X1944 (5,038,848 pixels)	3840x2160 (8,294,400 pixels)			
Sensor Size	1/2.5 inch	1/1.8 inch			
Pixel Size	2.2 μ m x 2.2 μ m	2.0 μ m x 2.0 μ m			
Spectral Response	380~650nm				
Exposure	Realtime Automatic, Single Auton	natic, Manual			
White Balance	Realtime Automatic, Manual				
Frame Rate	30 fps	30 fps			
Record Format	Image Capture Format: JPG Resolution: 2592x1944 Video Record Format: MOV Resolution: 1920x1080@30fps	Image Capture Format: JPG Resolution: 3840x2160 Video Record Format: MOV Resolution: 1920x1080@30fps			
Power Consumption	USB mode: DC 5V 500mA; WiFi	mode: DC 5V 1500mA			
WiFi Protocol	5G WiFi IEEE 802.11ac				
Working Frequency	5.180~5.825GHz				
Built-in Battery	3.7V, 2600mAh, Rechargable lithi	um bateries			
Continuous Working Time	Approx. 1.5 hours				
Charging Time	Approx. 2 hours				

- · Perfect compatibility with major operating systems: Windows, iOS and Android
- · Alternative through WiFi or USB connects to PC directly
- · Built-in 2650maH 3.7v safe and sable lithium battery, supporting more than 90 minutes continuous working time
- · Mobile phone and tablet scan exclusive QR code wireless point-to-point connection expansion screen



# Solution 4 for Biological Trinocular Microscope

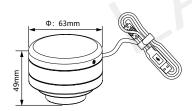
## USB Camera (C-mount)



#### Camera List

Applicable Microscope	8.0 MP	5.0 MP	PC Software	APP	5G WiFi Output	HDMI Output	USB Output
Standard C Mount	MC4K	MC500-G3	Pixit Pro	KoPa WiFi Lab	N/A	N/A	Available

#### Specifications



Resolution	5.0 MP	8.0 MP
Sensor Type	OnSemi AR0521 CMOS	Sony IMX334 CMOS
Shutter Type	Electronic rolling	Electronic rolling
Max. Resolution	2595X1944 (5,038,848 pixels)	3840x2160 (8,294,400 pixels)
Sensor Size	1/2.5 inch	1/1.8 inch
Pixel Size	2.2 μ m x 2.2 μ m	2.0 μ m x 2.0 μ m
Spectral Response	380~650nm	
Exposure	Realtime Automatic, Single Auto	matic, Manual
White Balance	Realtime Automatic, Manual	
Frame Rate	2592x1944 @30fps	3840x2160 @30fps
Record Format	Image Capture Format: JPG Resolution: 2592x1944 Video Record Format: MOV Resolution: 1920x1080@30fps	Image Capture Format: JPG Resolution: 3840x2160 Video Record Format: MOV Resolution: 1920x1080@30fps

- · High performance and price ratio
- · USB high speed video transmission up to 30 fps
- · Excellent auto white balance and color reduction
- · Driver-free and plug and play, no fear of system upgrade and re-installation
- · Pixit Pro software with measurement and image processing tools
- Compact design, sturdy aluminum housing case
- · Compatible with third-party imaging software

## Solution 1 for Stereo Binocular Microscope

### Embedded Smart Camera (Dovetail)



#### Camera List

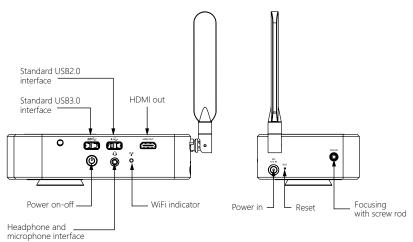
Applicable Microscope	12.0 MP	8.0 MP	PC Software	APP	5G WiFi Output	HDMI Output	USB Output
Olympus SZX Series	TE1200-OT	/	D: '. D	KoPa WiFi Lab AO			27/4
Nikon SMZ Series	TE1200-NT	/	Pixit Pro	KoPa WiFi Lab	Avaiable	Avaiable	N/A

#### Specifications



Resolution	12.0 MP
Sensor Type	Sony IMX412 CMOS
Shutter Type	Electronic rolling
Max. Resolution	4000x3000 (12,000,000 pixels)
Sensor Size	1/2.3 inch
Pixel Size	1.55 μ m x 1.55 μ m
Spectral Response	380~650nm
Exposure	Realtime Automatic, Single Automatic, Manual
White Balance	Realtime Automatic, Manual
Frame Rate	25 fps
Record Format	Image Capture Format: JPG Resolution: 4000x3000 Video Record Format: MOV Resolution: 1920x1080@25fps
Power Consumption	DC 12V 3A
HDMI Output	Auto-adaptive dispaly, up to 3840x2160 P30
WiFi Protocol	5G WiFi IEEE 802.11ac
Working Frequency	5.180~5.825GHz

- · Perfect compatibility with major operating systems: Windows, iOS and Android
- · Built-in deeply customized operating system
- · Comes with imaging APP, automatically display camera image after power on
- · Built-in high-power reduction lens for large field of view
- · Accurate and simple focusing with screw rod, to realize parfocality
- · 32 GB RAM, support USB flash disk to export picture and video
- · 4K HDMI output to monitor, TV, and projector, connects to PC through WiFi
- · USB interface connects mouse and keyboard for convenient measurement and text input
- · Mobile phone and tablet scan exclusive QR code wireless point-to-point connection expansion screen



# Solution 1 \_\_\_\_\_\_\_ for Stereo Trinocular Microscope

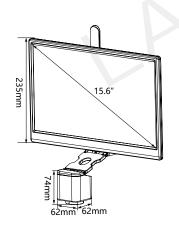
### All-in-one Smart Camera (Dovetail)



#### Camera List

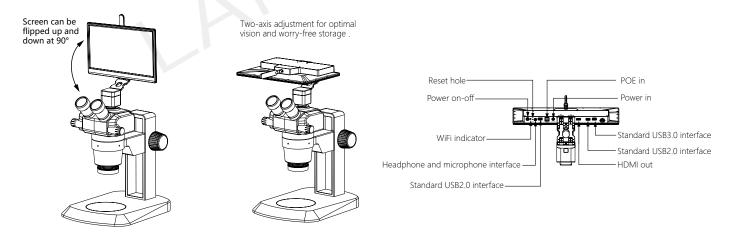
Applicable Microscope	12.0 MP	8.0 MP	PC Software	APP	5G WiFi Output	HDMI Output	USB Output
Olympus Trinocular	JX1200-O	JX800-O	Pixit Pro	KoPa WiFi Lab AO		Avaiable	N/A
Nikon Trinocular	JX1200-N	JX800-N		KoPa WiFi Lab	Avaiable		

#### Specifications



Resolution	12.0 MP	8.0 MP			
Sensor Type	Sony IMX412 CMOS	Sony IMX334 CMOS			
Shutter Type	Electronic rolling	Electronic rolling			
Max. Resolution	4000x3000 (12,000,000 pixels)	3840x2160 (8,294,400 pixels)			
Sensor Size	1/2.3 inch	1/1.8 inch			
Pixel Size	1.55 μ m x 1.55 μ m	2.0 μ m x 2.0 μ m			
Spectral Response	380~650nm				
Exposure	Realtime Automatic, Single Auton	natic, Manual			
White Balance	Realtime Automatic, Manual				
Frame Rate	4000x3000 @25fps	3840x2160 @25fps			
Record Format	Image Capture Format: JPG Resolution: 4000x3000 Video Record Format: MOV Resolution: 1920x1080@25fps	Image Capture Format: JPG Resolution: 3840x2160 Video Record Format: MOV Resolution: 1920x1080@25fps			
Power Consumption	DC 12V 5A	-			
HDMI Output	Auto-adaptive dispaly, up to 3840:	x2160 P30			
WiFi Protocol	5G WiFi IEEE 802.11ac				
Working Frequency	5.180~5.825GHz				

- · Perfect compatibility with major operating systems: Windows, iOS and Android
- · Equipped with an all-in-one 15.6-inch 100% color gamut and 1080P HD screen
- · Built-in deeply customized operating system coming with imaging APP, automatically display camera image after power on
- · 32GB RAM, support USB flash disk to export picture, video data
- · 4K HDMI output to monitor, TV, and projector
- · USB interface connects mouse and keyboard for convenient measurement and text input
- · Mobile phone and tablet scan exclusive QR code wireless point-to-point connection expansion screen



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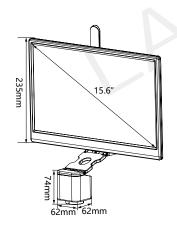
### All-in-one Smart Camera (C-mount)



#### Camera List

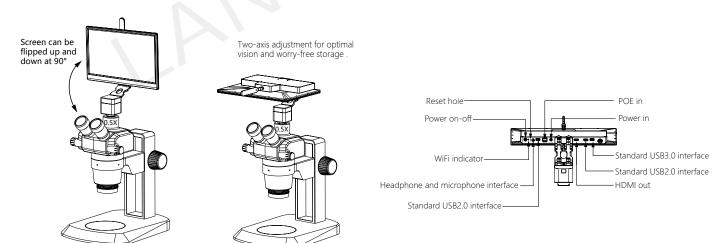
Applicable Microscope	12.0 MP	8.0 MP	PC Software	APP	5G WiFi Output	HDMI Output	USB Output
Standard C Mount	JX1200	JX800	Pixit Pro	KoPa WiFi Lab AO KoPa WiFi Lab	Avaiable	Avaiable	N/A

#### Specifications



Resolution	12.0 MP	8.0 MP
Sensor Type	Sony IMX412 CMOS	Sony IMX334 CMOS
Shutter Type	Electronic rolling	Electronic rolling
Max. Resolution	4000x3000 (12,000,000 pixels)	3840x2160 (8,294,400 pixels)
Sensor Size	1/2.3 inch	1/1.8 inch
Pixel Size	1.55 μ m x 1.55 μ m	2.0 μ m x 2.0 μ m
Spectral Response	380~650nm	
Exposure	Realtime Automatic, Single Auton	natic, Manual
White Balance	Realtime Automatic, Manual	
Frame Rate	4000x3000 @ 25fps	3840x2160 @ 25fps
Record Format	Image Capture Format: JPG Resolution: 4000x3000 Video Record Format: MOV Resolution: 1920x1080@25fps	Image Capture Format: JPG Resolution: 3840x2160 Video Record Format: MOV Resolution: 1920x1080@25fps
Power Consumption	DC 12V 5A	
HDMI Output	Auto-adaptive dispaly, up to 3840	x2160 P30
WiFi Protocol	5G WiFi IEEE 802.11ac	
Working Frequency	5.180~5.825GHz	

- · Perfect compatibility with major operating systems: Windows, iOS and Android
- Equipped with an all-in-one 15.6-inch 100% color gamut and 1080P HD screen
- Built-in deeply customized operating system coming with imaging APP, automatically display camera image after power on
- 32GB RAM, support USB flash disk to export picture, video data
- 4K HDMI output to monitor, TV, and projector
- · USB interface connects mouse and keyboard for convenient measurement and text input
- · Mobile phone and tablet scan exclusive QR code wireless point-to-point connection expansion screen



# Solution 3 for Stereo Trinocular Microscope

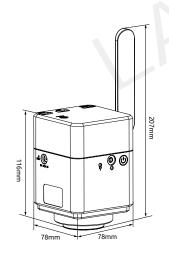
## Embedded Smart Camera (Dovetail)



#### Camera List

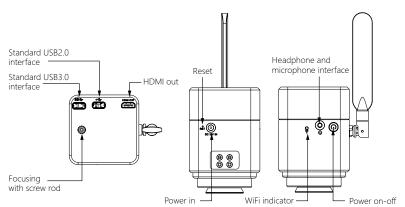
Applicable Microscope	12.0 MP	8.0 MP	PC Software	APP	5G WiFi Output	HDMI Output	USB Output
Olympus Trinocular	HW1200Z-O	/	D: '. D	KoPa WiFi Lab AO			27/4
Nikon Trinocular	HW1200Z-N	/	Pixit Pro	KoPa WiFi Lab	Avaiable	Avaiable	N/A

#### Specifications



Resolution	12.0 MP
Sensor Type	Sony IMX412 CMOS
Shutter Type	Electronic rolling
Max. Resolution	4000x3000 (12,000,000 pixels)
Sensor Size	1/2.3 inch
Pixel Size	1.55 μ m x 1.55 μ m
Spectral Response	380~650nm
Exposure	Realtime Automatic, Single Automatic, Manual
White Balance	Realtime Automatic, Manual
Frame Rate	4000x3000 @25fps
Record Format	Image Capture Format: JPG Resolution: 4000x3000 Video Record Format: MOV Resolution: 1920x1080@25fps
Power Consumption	DC 12V 3A
HDMI Output	Auto-adaptive dispaly, up to 3840x2160 P30
WiFi Protocol	5G WiFi IEEE 802.11ac
Working Frequency	5.180~5.825GHz

- · Perfect compatibility with major operating systems: Windows, iOS and Android
- Built-in deeply customized operating system
- Comes with imaging APP, automatically display camera image after power on
- Built-in high-power reduction lens for large field of view
- Accurate and simple focusing with screw rod, to realize parfocality
- · 32 GB RAM, support USB flash disk to export picture and video
- · 4K HDMI output to monitor, TV, and projector, connects to PC through WiFi
- · USB interface connects mouse and keyboard for convenient measurement and text input
- · Mobile phone and tablet scan exclusive QR code wireless point-to-point connection expansion screen



# Solution 4 for Stereo Trinocular Microscope

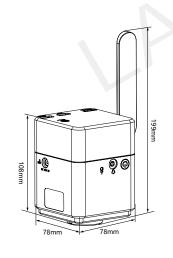
### Embedded Smart Camera (C-mount)



#### Camera List

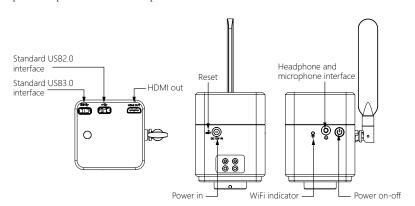
Applicable Microscope	12.0 MP	8.0 MP	PC Software	APP	5G WiFi Output	HDMI Output	USB Output
Standard C Mount	HW1200Z	/	Pixit Pro	KoPa WiFi Lab AO KoPa WiFi Lab	Avaiable	Avaiable	N/A

#### Specifications



Resolution	12.0 MP
Sensor Type	Sony IMX412 CMOS
Shutter Type	Electronic rolling
Max. Resolution	4000x3000 (12,000,000 pixels)
Sensor Size	1/2.3 inch
Pixel Size	1.55 μ m x 1.55 μ m
Spectral Response	380~650nm
Exposure	Realtime Automatic, Single Automatic, Manual
White Balance	Realtime Automatic, Manual
Frame Rate	4000x3000 @25fps
Record Format	Image Capture Format: JPG Resolution: 4000x3000 Video Record Format: MOV Resolution: 1920x1080@25fps
Power Consumption	DC 12V 3A
HDMI Output	Auto-adaptive dispaly, up to 3840x2160 P30
WiFi Protocol	5G WiFi IEEE 802.11ac
Working Frequency	5.180~5.825GHz

- $\cdot\;$  Perfect compatibility with major operating systems: Windows, iOS and Android
- · Built-in deeply customized operating system
- Comes with imaging APP, automatically display camera image after power on
- Built-in high-power reduction lens for large field of view
- Accurate and simple focusing with screw rod, to realize parfocality
- · 32 GB RAM, support USB flash disk to export picture and video
- · 4K HDMI output to monitor, TV, and projector, connects to PC through WiFi
- · USB interface connects mouse and keyboard for convenient measurement and text input
- · Mobile phone and tablet scan exclusive QR code wireless point-to-point connection expansion screen



# Solution 1 \_\_\_\_\_\_\_ for Inverted Microscope

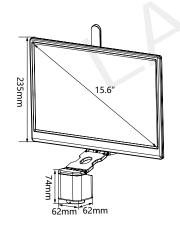
### All-in-one Smart Camera (C-mount)



#### Camera List

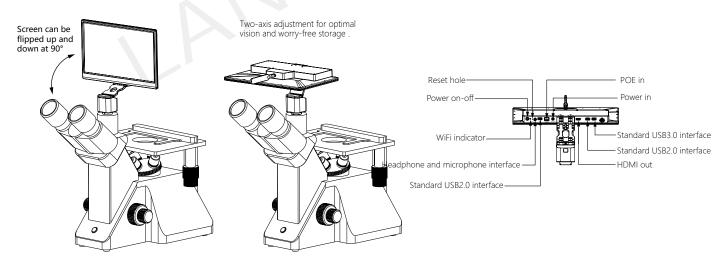
Applicable Microscope	12.0 MP	8.0 MP	PC Software	APP	5G WiFi Output	HDMI Output	USB Output
Standard C Mount	JX1200	JX800	Pixit Pro	KoPa WiFi Lab AO KoPa WiFi Lab	Avaiable	Avaiable	N/A

#### Specifications



Resolution	12.0 MP 8.0 MP			
Sensor Type	Sony IMX412 CMOS Sony IMX334 CMOS			
Shutter Type	Electronic rolling Electronic rolling			
Max. Resolution	4000x3000 (12,000,000 pixels)	3840x2160 (8,294,400 pixels)		
Sensor Size	1/2.3 inch	1/1.8 inch		
Pixel Size	1.55 μ m x 1.55 μ m	2.0 μ m x 2.0 μ m		
Spectral Response	380~650nm			
Exposure	Realtime Automatic, Single Automatic, Manual			
White Balance	Realtime Automatic, Manual			
Frame Rate	4000x3000 @25fps	3840x2160 @25fps		
Record Format	Image Capture Format: JPG Resolution: 4000x3000 Video Record Format: MOV Resolution: 1920x1080@25fps	Image Capture Format: JPG Resolution: 3840x2160 Video Record Format: MOV Resolution: 1920x1080@25fps		
Power Consumption	DC 12V 5A			
HDMI Output	Auto-adaptive dispaly, up to 3840x2160 P30			
WiFi Protocol	5G WiFi IEEE 802.11ac			
Working Frequency	5.180~5.825GHz			

- · Perfect compatibility with major operating systems: Windows, iOS and Android
- · Equipped with an all-in-one 15.6-inch 100% color gamut and 1080P HD screen
- · Built-in deeply customized operating system coming with imaging APP, automatically display camera image after power on
- · 32GB RAM, support USB flash disk to export picture, video data
- · 4K HDMI output to monitor, TV, and projector
- · USB interface connects mouse and keyboard for convenient measurement and text input
- · Mobile phone and tablet scan exclusive QR code wireless point-to-point connection expansion screen



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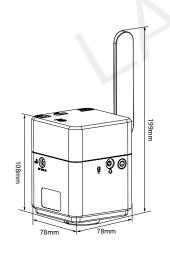
### Embedded Smart Camera (C-mount)



#### Camera List

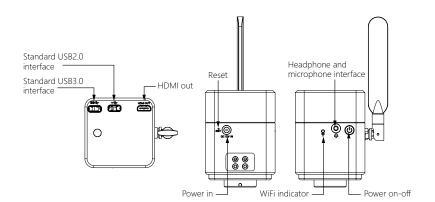
Applicable Microscope	12.0 MP	8.0 MP	PC Software	APP	5G WiFi Output	HDMI Output	USB Output
Standard C Mount	HW1200Z	/	Pixit Pro	KoPa WiFi Lab AO KoPa WiFi Lab	Avaiable	Avaiable	N/A

#### **Specifications**



Resolution	12.0 MP		
Sensor Type	Sony IMX412 CMOS		
Shutter Type	Electronic rolling		
Max. Resolution	4000x3000 (12,000,000 pixels)		
Sensor Size	1/2.3 inch		
Pixel Size	1.55 μ m x 1.55 μ m		
Spectral Response	380~650nm		
Exposure	Realtime Automatic, Single Automatic, Manual		
White Balance	Realtime Automatic, Manual		
Frame Rate	4000x3000 @25fps		
Record Format	Image Capture Format: JPG Resolution: 4000x3000 Video Record Format: MOV Resolution: 1920x1080@25fps		
Power Consumption	DC 12V 3A		
HDMI Output	Auto-adaptive dispaly, up to 3840x2160 P30		
WiFi Protocol	5G WiFi IEEE 802.11ac		
Working Frequency	5.180~5.825GHz		

- · Perfect compatibility with major operating systems: Windows, iOS and Android
- · Built-in deeply customized operating system Comes with imaging APP, automatically display camera image after power on
- · Accurate and simple focusing with screw rod, to realize parfocality
- · 32 GB RAM, support USB flash disk to export picture and video
- · 4K HDMI output to monitor, TV, and projector
- · USB interface connects mouse and keyboard for convenient measurement and text input
- Mobile phone and tablet scan exclusive QR code wireless point-to-point connection expansion screen



Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. January 2021  $\,$ ©2021 LANOPTIK





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