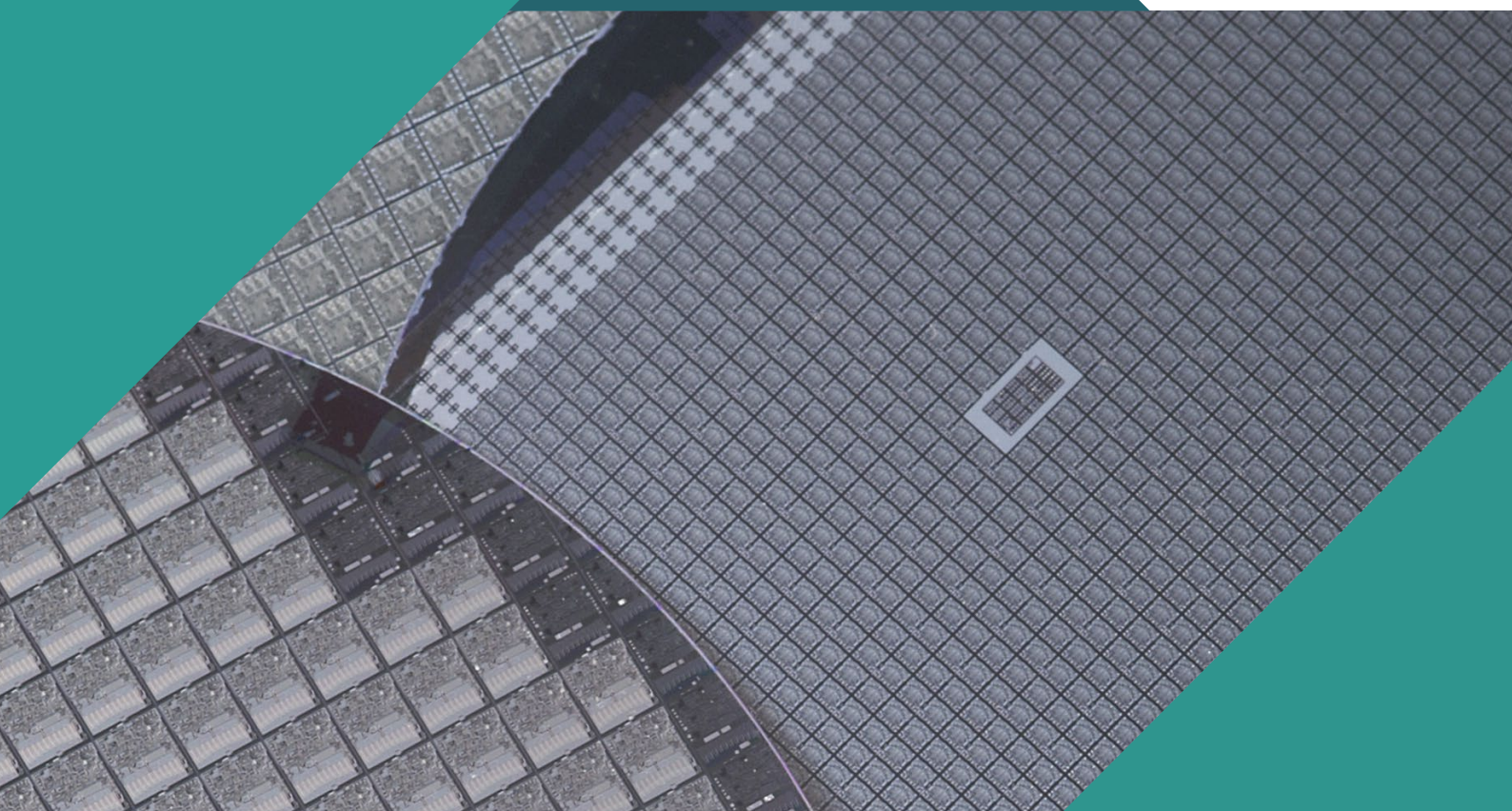




# LANOPTIK

## CATALOG 2021

*INNOVATES MICROSCOPY  
IMAGING & ANALYSIS*



CREATIVE • INNOVATION • PROCESS



Lanoptik Technologies is committed to the innovation of microscope camera, metallographic analysis software, and 5G Wi-Fi microscope interactive teaching system.

Lanoptik develops and distributes instruments for image acquisition and image processing in industrial and scientific applications. Intelligent image processing technologies increasingly permit implementation of new data acquisition methods and more efficient work process design in the fields of industrial production, medicine and research as well as safety engineering.





## CONTENTS

<b>A</b>	<b>CONTENTS</b>	02 / 03
<b>B</b>	<b>EMBEDDED CAMERAS</b>	
	All-in-one Embedded Smart Camera	04 / 05
	Embedded Smart Camera	06 / 07
	Embedded WiFi Camera	08 / 09
	Embedded USB Camera	10 / 11
<b>C</b>	<b>SMART CAMERAS</b>	
	All-in-one Smart Camera	12 / 13
	4K Smart Camera	14 / 15
<b>D</b>	<b>5G WIFI MICROSCOPE CAMERAS</b>	16 / 17
<b>E</b>	<b>USB MICROSCOPE CAMERAS</b>	18 / 19
<b>F</b>	<b>HDMI CAMERA WITH DISPLAY</b>	20 / 21
<b>G</b>	<b>HDMI/USB DUAL OUTPUT CAMERAS</b>	
	HDMI/USB Dual Output Camera HDMI210	22 / 23
	HDMI/USB Dual Output Camera DM350C	24 / 25
<b>H</b>	<b>FULL HD &amp; 4K CAMERAS</b>	26 / 27
<b>I</b>	<b>HDMI VIDEO MICROSCOPE</b>	
	Low Magnification HDMI Microscope	28 / 29
	Continuously Zoom HDMI Microscope	30 / 31
	Large FOV HDMI Microscope	32 / 33
	All-in-one HDMI Video Microscope	34 / 35
	3D HDMI Video Microscope	36 / 37
	Motorized Zoom Auto-calibration Measuring Microscope	38 / 39
	Manual Zoom Auto-calibration Measuring Microscope	40 / 41
<b>J</b>	<b>IWORKS SERIES MICROSCOPY SOFTWARE</b>	
	I Series Software for Material Analysis	42 / 43
	H Series Software for Hardness Testing	/ 44
	M Series Software for Measuring Microscope	/ 45
<b>K</b>	<b>PIXIT PRO SOFTWARE</b>	/ 46
<b>L</b>	<b>APP FOR MOBILE DEVICES</b>	/ 47
<b>M</b>	<b>CAMERA SOLUTIONS FOR MICROSCOPE</b>	48 / 51





# All-in-one Embedded Smart Camera



5G Wi-Fi and 4K Ultra HD technology enhance your scientific research. More compatible, more convenient and better performance.



## Features & Benefits

- Work seamlessly with a wide range of computing and mobile devices running most major operating systems, from Windows to iOS, and Android
- 15.6-inch full color gamut 4K UHD display ensures excellent image quality
- Come with imaging APP, automatically display live images after power on
- 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 to realize eyepiece-to-monitor synchronization
- 32GB built-in RAM, support U-disk storage for picture and video
- USB interface for wireless keyboard and mouse, easy to input and operate the system
- Mobile devices access the system by scanning the exclusive QR code
- Connect to PC through WiFi, and 1080P HDMI output to display, TV and projector



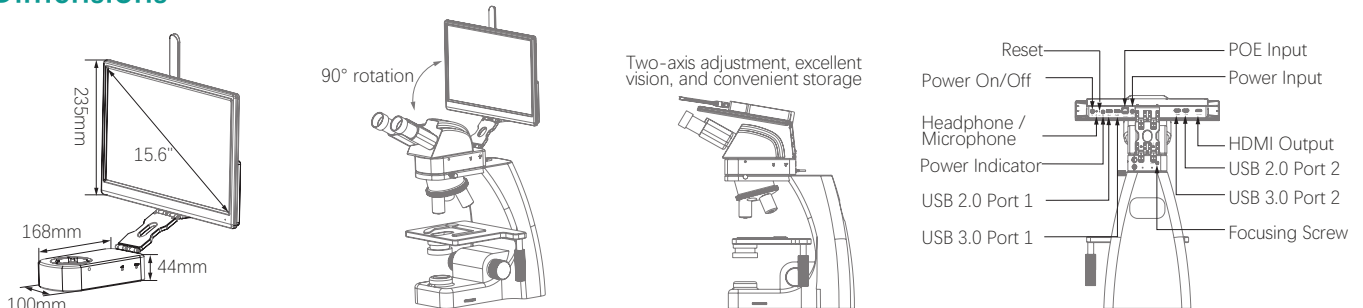
## Specifications

Camera model	HE810	HE810-N	HE800-L	HE810-Z
Applicable microscope	Olympus CX series, BX series	Nikon E series, Ci/Ni series	Leica DM series	Zeiss Primo Star
Coupler type	Dovetail groove of corresponding microscope			
Resolution	8.0 MP (3840x2160)			
Sensor type	SONY IMX334 CMOS			
Shutter type	Electronic rolling shutter			
Sensor size	1/1.18"			
Pixel size	2.0μm x 2.0μm			
Dynamic range	72dB (Non-HDR mode)			
SNR	≥ 56dB			
Spectral response	380~650nm			
Exposure	Realtime Automatic, Single Automatic, Manual			
White balance	Realtime Automatic, Single Automatic, Manual (R, B adjustable)			
Frame rate	25fps @ 3840x2160			
Record format	Image capture format: JPG; Resolution: 3840x2160, 2592x1944, 1920x1080 Video record format: MP4 file; Resolution: 1920x1080 @ 25fps			
HDMI output	Automatically adapt to monitor, Max.: 3840x2160 P30			
Wi-Fi protocol	5G Wi-Fi IEEE 802.11ac			
Working frequency	5.180~5.825GHz			

Camera model	HE1200	HE1200-N	HE1200-L	HE12P0-Z
Applicable microscope	Olympus CX series, BX series	Nikon E series, Ci/Ni series	Leica DM series	Zeiss Primo Star
Coupler type	Dovetail groove of corresponding microscope			
Resolution	12.0 MP (4000x3000)			
Sensor type	SONY IMX412 CMOS			
Shutter type	Electronic rolling shutter			
Sensor size	1/2.3"			
Pixel size	1.55μm x 1.55μm			
Dynamic range	TBD			
SNR	TBD			
Spectral response	380~650nm			
Exposure	Realtime Automatic, Single Automatic, Manual			
White balance	Realtime Automatic, Single Automatic, Manual (R, B adjustable)			
Frame rate	25fps @ 3840x2160; 15fps @ 4000x3000			
Record format	Image capture format: JPG; Resolution: 4000x3000, 3840x2160, 2592x1944, 1920x1080 Video record format: MOV; Resolution: 1920x1080 @ 25fps			
HDMI output	Automatically adapt to monitor, Max.: 1920x1080 P60Hz			
Wi-Fi protocol	5G WiFi IEEE 802.11ac			
Working frequency	5.180~5.825GHz			

\* For Nikon Ei Microscope, the models of camera are HE810-NE and HE1200-NE.

## Dimensions





# Embedded Smart Camera

5G Wi-Fi and 4K Ultra HD technology enhance your scientific research. More compatible, more convenient and better performance.



## Features & Benefits

- Work seamlessly with a wide range of computing and mobile devices running most major operating systems, from Windows to iOS, and Android
- Come with imaging APP, automatically display live images after power on
- 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 to realize eyepiece-to-monitor synchronization
- 32GB built-in RAM, support U-disk storage for picture and video
- USB interface for wireless keyboard and mouse, easy to input and operate the system
- Mobile devices access the system by scanning the exclusive QR code
- Connect to PC through Wi-Fi, and 1080P HDMI output to display, TV and projector

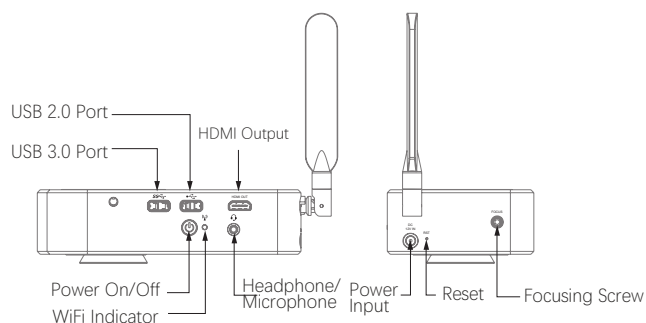
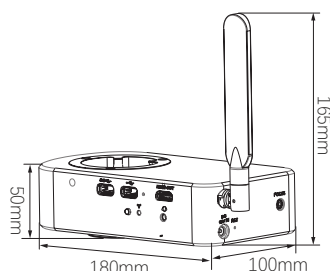
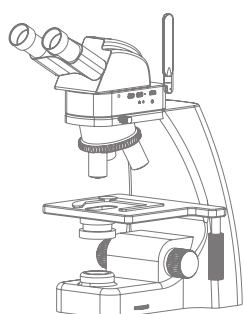
## Specifications

Camera model	TE800	TE800-N	TE800-L	TE800-Z
Applicable microscope	Olympus CX series, BX series	Nikon E series, Ci/Ni series	Leica DM series	Zeiss Primo Star
Coupler type	Dovetail groove of corresponding microscope			
Resolution	8.0 MP (3840x2160)			
Sensor type	SONY IMX334 CMOS			
Shutter type	Electronic rolling shutter			
Sensor size	1/1.8"			
Pixel size	2.0μm x 2.0μm			
Dynamic range	> 72dB (Non-HDR mode)			
SNR	≥ 56dB			
Spectral response	380~650nm			
Exposure	3.9ms~320ms, Automatic & Manual			
White balance	Real-time Automatic, Manual adjustment			
Frame rate	25fps @ 3840x2160			
Record format	Image capture format: JPG; Resolution: 3840x2160, 2592x1944, 1920x1080 Video record format: MP4 file; Resolution: 1920x1080 @ 25fps			
HDMI output	Automatically adapt to monitor, Max.: 3840x2160 P30			
WiFi protocol	5G WiFi IEEE 802.11ac			
Working frequency	5.180~5.825GHz			

Camera model	TE1200	TE1200-N	TE1200-L	TE1200-Z
Applicable microscope	Olympus CX series, BX series	Nikon E series, Ci/Ni series	Leica DM series	Zeiss Primo Star
Coupler type	Dovetail groove for corresponding microscope			
Resolution	12.0 MP (4000x3000)			
Sensor type	SONY IMX412 CMOS			
Shutter type	Electronic rolling shutter			
Sensor size	1/2.3"			
Pixel size	1.55μm x 1.55μm			
Dynamic range	TBD			
SNR	TBD			
Spectral response	380~650nm			
Exposure	Real-time Automatic, Manual adjustment			
White balance	Real-time Automatic, Manual adjustment			
Frame rate	25fps @ 3840x2160; 15fps @ 4000x3000			
Record format	Image capture format: JPG; Resolution: 4000x3000, 3840x2160, 2592x1944, 1920x1080 Video record format: MOV; Resolution: 1920x1080 @ 25fps			
HDMI output	Automatically adapt to monitor, Max.: 3840x2160 P30			
Wi-Fi protocol	5G WiFi IEEE 802.11ac			
Working frequency	5.180~5.825GHz			

\* For Nikon Ei Microscope, the models of camera are TE800-NE and TE1200-NE.

## Dimensions







# Embedded Wi-Fi Camera

Embedded design not only for biological microscope, but also for stereo microscope. No need to modify, directly make your microscope have remarkable digital imaging capabilities.



For biological microscopes



For stereo microscopes



## Features & Benefits

- Work seamlessly with a wide range of computing and mobile devices running most major operating systems, from Windows to iOS, and Android
- Wi-Fi and USB dual output for option by switch.
- WAN port available for long-distance transmission, through the network cable to connect a computer or router to achieve multi-user sharing.
- 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 to realize eyepiece-to-monitor synchronization
- Mobile devices access the system by scanning the exclusive QR code
- Different dovetail grooves design to couple with biological microscope and stereo microscope separately

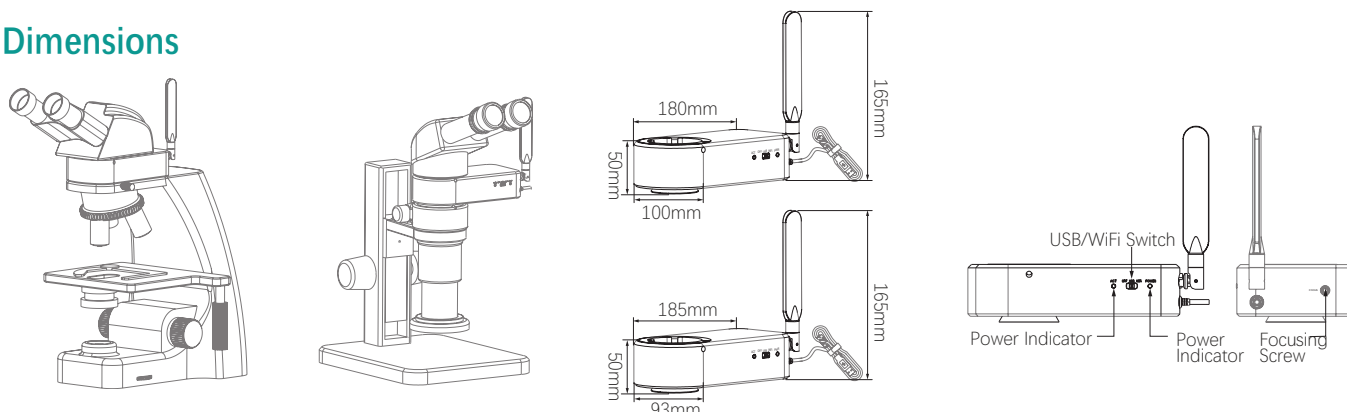
## Specifications

Camera model	CA800	CA800-BX	CA800-OT	CA800-y
Applicable microscope	Olympus CX series	Olympus BX series	Olympus SZX series	Zeiss Primo Star
Coupler type	Dovetail groove of corresponding microscope			
Resolution	8.0 MP (3840x2160)			
Sensor type	SONY IMX334 CMOS			
Shutter type	Electronic rolling shutter			
Sensor size	1/1.8"			
Pixel size	2.0μm x 2.0μm			
Dynamic range	72dB (Non-HDR mode)			
SNR	≥ 56dB			
Spectral response	380~650nm			
Exposure	3.9ms~320ms, Automatic & Manual			
White balance	Realtime Automatic, Single Automatic, Manual			
Frame rate	USB mode: 30fps @ 3840x2160, 2592x1944, 1920x1080, 1024x768, 640x480 WiFi mode: 30fps @ 3840x2160, 2592x1944, 1920x1080, 1024x768, 640x480			
Record format	Image capture format: JPG, BMP, PNG, TIFF; Resolution: 3840x2160, 2592x1944, 1920x1080, 1024x768, 640x480 Video record format: MJPG format AVI file; Resolution: 1920x1080, 1024x768, 640x480			
Power consumption	Wired: USB 2.0 DC 5.0V 500mA Wireless: USB 2.0 DC 5.0V 1500mA			
Wi-Fi protocol	5G WiFi IEEE 802.11ac			
Working frequency	5.180~5.825GHz			

Camera model	CA800-N	CA800-NK	CA800-NT	CA800-L
Applicable microscope	Nikon E series	Nikon Ci/Ni series	Nikon SMZ series	Leica DM series
Coupler type	Dovetail groove of corresponding microscope			
Resolution	8.0 MP (3840x2160)			
Sensor type	SONY IMX334 CMOS			
Shutter type	Electronic rolling shutter			
Sensor size	1/1.8"			
Pixel size	2.0μm x 2.0μm			
Dynamic range	72dB (Non-HDR mode)			
SNR	≥ 56dB			
Spectral response	380~650nm			
Exposure	3.9ms~320ms, Automatic & Manual			
White balance	Realtime Automatic, Single Automatic, Manual			
Frame rate	USB mode: 30fps @ 3840x2160, 2592x1944, 1920x1080, 1024x768, 640x480 WiFi mode: 30fps @ 3840x2160, 2592x1944, 1920x1080, 1024x768, 640x480			
Record format	Image capture format: JPG, BMP, PNG, TIFF; Resolution: 3840x2160, 2592x1944, 1920x1080, 1024x768, 640x480 Video record format: MJPG format AVI file; Resolution: 1920x1080, 1024x768, 640x480			
Power consumption	Wired: USB 2.0 DC 5.0V 500mA; Wireless: USB 2.0 DC 5.0V 1500mA			
Wi-Fi protocol	5G WiFi IEEE 802.11ac			
Working frequency	5.180~5.825GHz			

\* Model CA800-Ei available for Nikon Ei Microscope

## Dimensions





## Embedded USB Camera

The most recommended embedded USB camera for you to get excellent images without a trinocular head. Observe images on the monitor and eyepiece simultaneously without switching the optical path.



### Features & Benefits

- USB high speed video transmission up to 30 fps at 8.3 megapixel
- Excellent auto white balance and color reduction
- Driver-free installation and plug and play, no fear of system upgrade and reinstallation
- 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 to realize eyepiece-to-monitor synchronization
- Easy-to-use Pixit Pro software with measurement and image processing tools



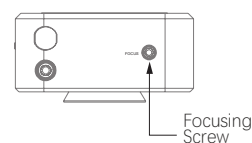
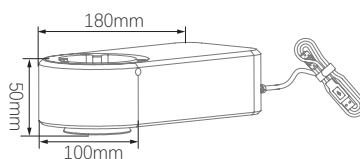
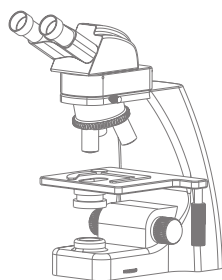
## Specifications

Camera model	HC4K	HC4K-BX	HC4K-N	HC4K-NK	HC4K-L
Applicable microscope	Olympus CX series	Olympus BX series	Nikon E series	Nikon Ci/Ni series	Leica DM series
Coupler type	Dovetail groove of corresponding microscope				
Resolution	8.0 MP (3840x2160)				
Sensor type	SONY IMX334 CMOS				
Shutter type	Electronic rolling shutter				
Sensor size	1/1.8"				
Pixel size	2.0μm x 2.0μm				
Dynamic range	72dB (Non-HDR mode)				
SNR	≥ 56dB				
Spectral response	380~650nm				
Exposure	3.9ms~320ms, Automatic & Manual				
White balance	Realtime Automatic, Single Automatic, Manual				
Frame rate	30fps @ 3840x2160, 2592x1944, 1920x1080, 1024x768, 640x480				
Record format	Image capture format: JPG, BMP, PNG, TIFF, PDF Resolution: 3840x2160, 2592x1944, 1920x1080, 1024x768, 640x480				
	Video record format: MJPG format AVI file Resolution: 1920x1080, 1024x768, 640x480				
HDMI output	Automatically adapt to monitor, Max.: 3840x2160 P60Hz				

\* Model HC4K-Ei for Nikon Ei Microscope is available.

\* Model HC4K-Z for Zeiss Primo Star microscope will be available from March, 2021.

## Dimensions





# All-in-one Smart Camera

All-in-one smart camera equipped with 4K ultra-high-definition display. More than you can get from a microscope camera.



## Features & Benefits

- Work seamlessly with a wide range of computing and mobile devices running most major operating systems, from Windows to iOS, and Android
- 15.6-inch full color gamut 4K UHD display ensures excellent image quality
- Come with imaging APP, automatically display live images after power on
- 32GB built-in RAM, support U-disk storage for picture and video
- USB interface for wireless keyboard and mouse, easy to input and operate the system
- Mobile devices access the system by scanning the exclusive QR code
- Connect to PC through WiFi, and 1080P HDMI output to display, TV and projector

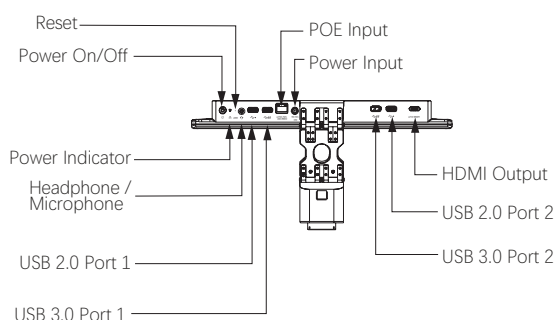
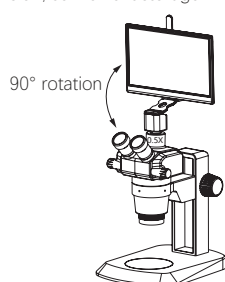
## Specifications

Camera model	JX800-O	JX800-N	JX800-L	JX800-Z
microscope	Olympus CX series, BX series	Nikon E series, Ci/Ni series	Leica DM series	Zeiss Primo Star
Coupler type	Dovetail groove of corresponding microscope or C Mount			
Resolution	8.0 MP (3840x2160)			
Sensor type	SONY IMX334 CMOS			
Shutter type	Electronic rolling shutter			
Sensor size	1/1.8"			
Pixel size	2.0μm x 2.0μm			
Dynamic range	> 80dB			
SNR	≥ 50dB			
Spectral response	380~650nm			
Exposure	3.9ms~320ms, Automatic, Manual			
White balance	Real-time Automatic, Manual			
Frame rate	25fps @ 3840x2160			
Record format	Image capture format: JPG; Resolution: 3840x2160 Video record format: MP4 file; Resolution: 1920x1080@25fps			
HDMI output	Automatically adapt to monitor, Max.: 3840x2160 P60Hz			
WiFi protocol	5G WiFi IEEE 802.11ac			
Working frequency	5.180~5.825GHz			

Camera model	JX1200-O	JX1200-N	JX1200-L	JX1200-Z
Applicable microscope	Olympus CX series, BX series	Nikon E series, Ci/Ni series	Leica DM series	Zeiss Primo Star
Coupler type	Dovetail groove for corresponding microscope, or C Mount			
Resolution	12 MP (4000x3000)			
Sensor type	Sony IMX412 CMOS			
Shutter type	Electronic rolling shutter			
Sensor size	1/2.3"			
Pixel size	1.55μm x 1.55μm			
Dynamic range	TBD			
SNR	TBD			
Spectral response	380~650nm			
Exposure	Real-time Automatic, Manual			
White balance	Real-time Automatic, Manual			
Frame rate	25fps @ 3840x2160; 15fps @ 4000x3000			
Record format	Image capture format: JPG; Resolution: 4000x3000, 3840x2160, 2592x1944, 1920x1080 Video record format: MOV; Resolution: 1920x1080 @ 25fps			
HDMI output	Automatically adapt to monitor, Max.: 840x2160 P30			
Wi-Fi protocol	5G WiFi IEEE 802.11ac			
Working frequency	5.180~5.825GHz			

\* For C Mount type, the models of camera are JX800 and JX500.

Two-axis adjustment, excellent vision, convenient storage







## 4K Smart Camera

Smart camera equipped with 4K ultra-high-definition display. More than you can get from a microscope camera.



Dovetail groove

C-mount



### Features & Benefits

- Work seamlessly with a wide range of computing and mobile devices running most major operating systems, from Windows to iOS, and Android
- Come with imaging APP, automatically display live images after power on
- Embedded 50%/50% light splitting design without damaging original optical system \*
- Built-in high power reduction lens for large field of view
- Precise and simple focus of screw rod to realize eyepiece-to-monitor synchronization \*
- 32GB built-in RAM, support U-disk storage for picture and video
- USB interface for wireless keyboard and mouse, easy to input and operate the system
- Mobile devices access the system by scanning exclusive QR code
- Connect to PC through Wi-Fi, and 1080P HDMI output to display, TV and projector

\* Only for dovetail-mount-type models.



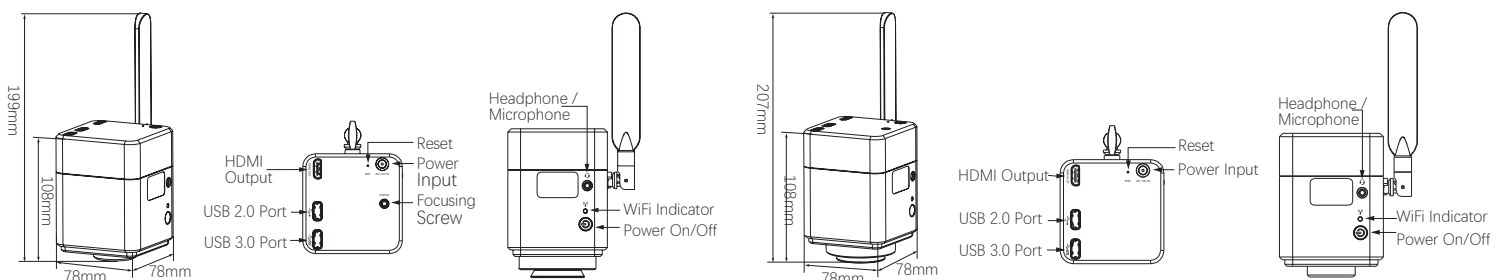
## Specifications

Camera model	HW800Z-O	HW800Z-N	HW800Z-L	HW800Z-Z
microscope	Olympus CX series, BX series	Nikon E series, Ci/Ni series	Leica DM series	Zeiss Primo Star
Coupler type	Dovetail groove of corresponding microscope or C Mount			
Resolution	8.0 MP (3840x2160)			
Sensor type	SONY IMX334 CMOS			
Shutter type	Electronic rolling shutter			
Sensor size	1/1.8"			
Pixel size	2.0μm x 2.0μm			
Dynamic range	> 80dB			
SNR	≥ 50dB			
Spectral response	380~650nm			
Exposure	3.9ms~320ms, Automatic, Manual			
White balance	Real-time Automatic, Manual			
Frame rate	25fps @ 3840x2160			
Record format	Image capture format: JPG; Resolution: 3840x2160 Video record format: MP4 file; Resolution: 1920x1080@25fps			
HDMI output	Automatically adapt to monitor, Max.: 3840x2160 P60Hz			
WiFi protocol	5G WiFi IEEE 802.11ac			
Working frequency	5.180~5.825GHz			

Camera model	HW1200Z-O	HW1200Z-N	HW1200Z-L	HW1200Z-Z
Applicable microscope	Olympus CX series, BX series	Nikon E series, Ci/Ni series	Leica DM series	Zeiss Primo Star
Coupler type	Dovetail groove for corresponding microscope, or C Mount			
Resolution	12 MP (4000x3000)			
Sensor type	Sony IMX412 CMOS			
Shutter type	Electronic rolling shutter			
Sensor size	1/2.3"			
Pixel size	1.55μm x 1.55μm			
Dynamic range	TBD			
SNR	TBD			
Spectral response	380~650nm			
Exposure	Real-time Automatic, Manual			
White balance	Real-time Automatic, Manual			
Frame rate	25fps @ 3840x2160; 15fps @ 4000x3000			
Record format	Image capture format: JPG; Resolution: 4000x3000, 3840x2160, 2592x1944, 1920x1080 Video record format: MOV; Resolution: 1920x1080 @ 25fps			
HDMI output	Automatically adapt to monitor, Max.: 840x2160 P30			
Wi-Fi protocol	5G WiFi IEEE 802.11ac			
Working frequency	5.180~5.825GHz			

\* For C Mount type, the models of camera are HW800Z and HW1200Z.

## Dimensions





# 5G Wi-Fi Microscope Camera

5G Wi-Fi (IEEE802.11ac) Microscope Camera with C mount or dovetail mount. Suitable for all types of microscope.



Dovetail groove



C mount & built-in battery



C-mount



## Features & Benefits

- Unique integrated wireless and USB output for mobile operation
- Reliable operation with iPhones, iPads, Android devices and PC
- Connects up to 10 devices simultaneously
- Free Micro WiFi Lab APP (for Wi-Fi connection)
- Imaging & measuring software Pixit Pro included (for USB connection to PC)
- Full 1080P record, up to 30fps at 2592x1944 resolution
- Built-in battery for portable outdoor operation, 2 hours endurance
- Mobile devices access the system by scanning exclusive QR code



## Specifications

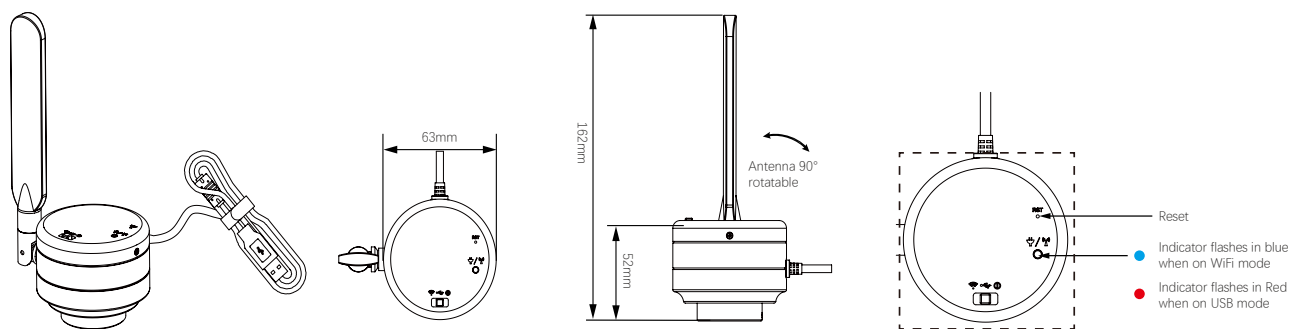
Camera model	MC500W-G1	MC500W-G2	MC4KW-G1	MC4KW-G2
Resolution	5.0 MP (2592x1944)		8.0 MP (3840x2160)	
Sensor type	OnSemi AR0521		SONY IMX334 CMOS	
Sensor size	1/2.5"		1/1.8"	
Pixel size	2.2μm x 2.2μm		2.0μm x 2.0μm	
Dynamic range	74.3dB linear, >96dB interlaced		72dB (Non-HDR mode)	
SNR	40dB		≥ 56dB	
Frame rate	USB mode: 30fps @ 2592x1944 WiFi mode: 30fps @ 3840x2160		USB mode: 30fps @ 3840x2160 WiFi mode: 30fps @ 3840x2160	
Built-in battery	/	Available	/	Available
Spectral response	380~650nm			
Shutter type	Electronic rolling shutter			
Exposure	3.9ms~320ms, Automatic & Manual			
White balance	Real-time Automatic, Manual			
Record format	Image capture format: JPG, BMP, PNG, TIFF; Resolution: 3840x2160, 2592x1944, 1920x1080, 1024x768, 640x480 Video record format: MJPG format AVI file; Resolution: 1920x1080, 1024x768, 640x480			
Power consumption	Wired: USB 2.0 DC 5.0V 500mA; Wireless: USB 2.0 DC 5.0V 1500mA			
Wi-Fi protocol	5G Wi-Fi IEEE 802.11ac			
Working frequency	5.180~5.825GHz			

\* For dovetail-groove mount type, the models of camera are MC500W-O and MC4KW-O for Olympus microscope; and MC500W-N and MC4KW-N for Nikon microscope.

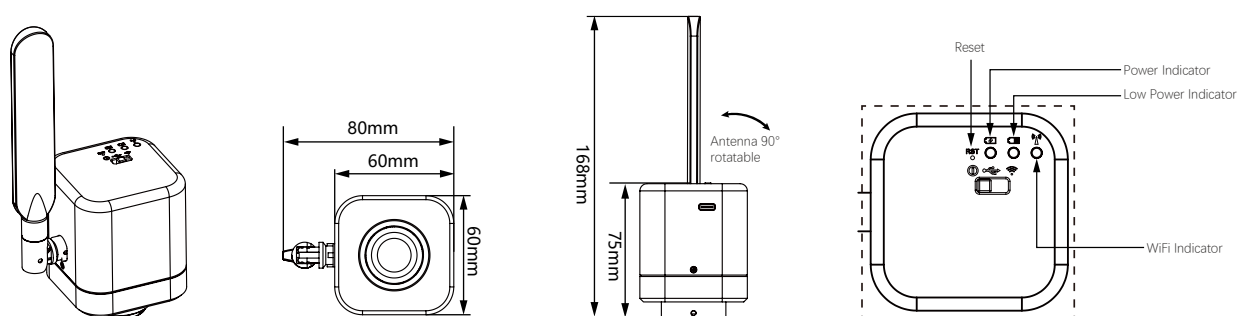
\* MC500W-G2 and MC4KW-G2 are models with built-in battery.

## Dimensions

MC500W-G1 & MC4K



MC4K-G2





# USB Microscope Camera

Excellent microscope camera series for routine microscope imaging and documentation.



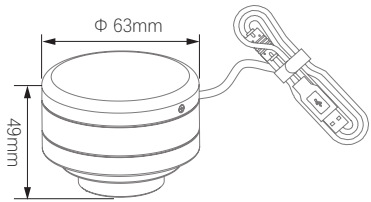
## Features & Benefits

- 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 reinstallation
- Pixit Pro software with measurement and image processing tools
- Compact design, sturdy aluminum housing case
- Compatible with third-party imaging software

# Specifications

Camera model	MC500-G3	MC4K
Coupler type	C-mount	C-mount
Resolution	5.0 MP (2592x1944)	8.0 MP (3840x2160)
Sensor type	Aptina CMOS AR0521	SONY CMOS IMX334
Shutter type	Electronic rolling shutter	Electronic rolling shutter
Sensor size	1/2.5"	1/1.8"
Pixel size	2.2μm x 2.2μm	2.0μm x 2.0μm
Dynamic range	74.3dB linear, >96dB interlace	>72dB (Non-HDR mode)
SNR	40dB	≥ 56dB
Spectral response	380~650nm	380~650nm
Exposure	3.9ms~320ms, Automatic, Manual	3.9ms~320ms, Automatic, Manual
White balance	Real-time Automatic, Single Automatic, Manual	Real-time Automatic, Single Automatic, Manual
Frame rate	30fps @ 2592x1944	30fps @ 3840x2160
Record format	Image capture format: JPG, BMP, PNG, TIFF, PDF Resolution: 2592x1944, 1920x1080, 1024x768, 640x480	Image capture format: JPG, BMP, PNG, TIFF, PDF Resolution: 3840x2160, 2592x1944, 1920x1080, 1024x768, 640x480
	Video record format: MJPG format AVI file Resolution: 1920x1080, 1024x768, 640x480	Video record format: MJPG format AVI file Resolution: 1920x1080, 1024x768, 640x480

# Dimensions





# HDMI Camera with Display

Integrated with ultra-wide dynamic camera and HDMI display, designed to improve operational convenience, suitable for various production inspections.



## Features & Benefits

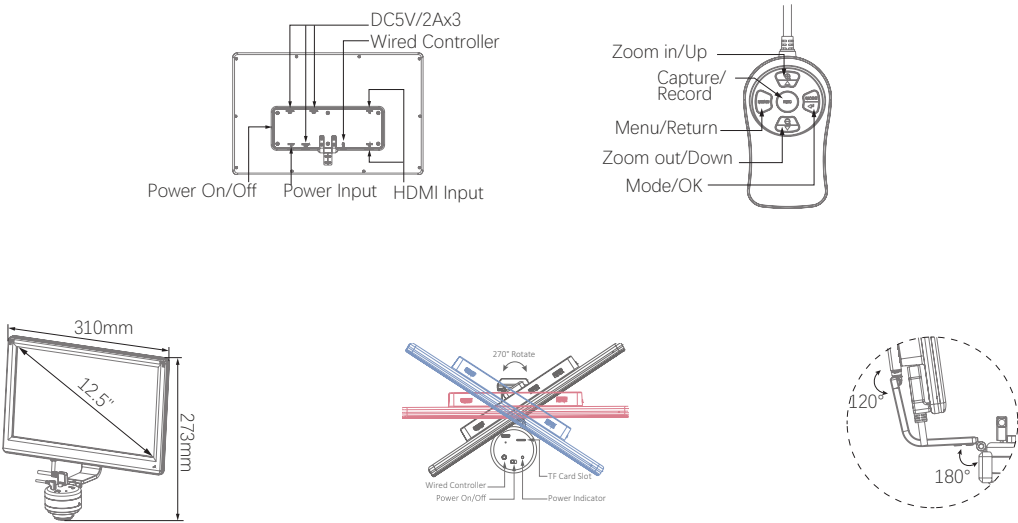
- Ultra-wide dynamic range and ultra-low-light sensitive
- Equipped with 12.5-inch 1080P high-definition display
- When starting up, it will image instantly and automatically
- Built-in biological / industrial switchable working modes
- Built-in adaptable LED / halogen lamp light source options
- Display can be rotated vertical 180° and horizontal 270°
- Wired remote control to reduce work intensity
- All powered by one HDMI cable directly



# Specifications

Product model	CE210
Resolution	2.1 MP (1920x1080)
Sensor type	SONY CMOS IMX291
Shutter type	Electronic rolling shutter
Sensor size	1/2.8"
Pixel size	2.9μm x 2.9μm
Dynamic range	128dB
SNR	30dB
Spectral response	380~650nm
Exposure	Real-time Automatic, Single Automatic, Manual R, G, B adjustment
White balance	Real-time Automatic, Single Automatic, Manual
Frame rate	HDMI: 1920X1080P30, 1280x720P60
Record format	Image capture format: JPG; Resolution: 2592x1944, 1920x1080, 1024x768, 640x480 Video record format: MOV; Resolution: 1920x1080, 1280x720
Record Path	TF Card (Up to 128G), hot plug
Screen size	12.5-inch
Screen Type	a-Si TFT-LCD / IPS / Foggy
Resolution	1920x1080
Display color	16.7M
Brightness	300 Nit
Contrast	800:1
Visual angle	Horizontal/vertical: 170°
Power supply	Adapter: Input AC100~240V, 50~60Hz; Output: DC12V 5A 60W Monitor: USB-A-Output: DC5V / 2Ax3
Image input	HDMI1, HDMI2
Image output	HDMI Type C (Mini HDMI)

# Dimensions





## Dual Output HDMI & USB Camera

High-performance HDMI / USB dual output camera with ultra-wide dynamic range up to 128dB. Wired control is available for easier operation.



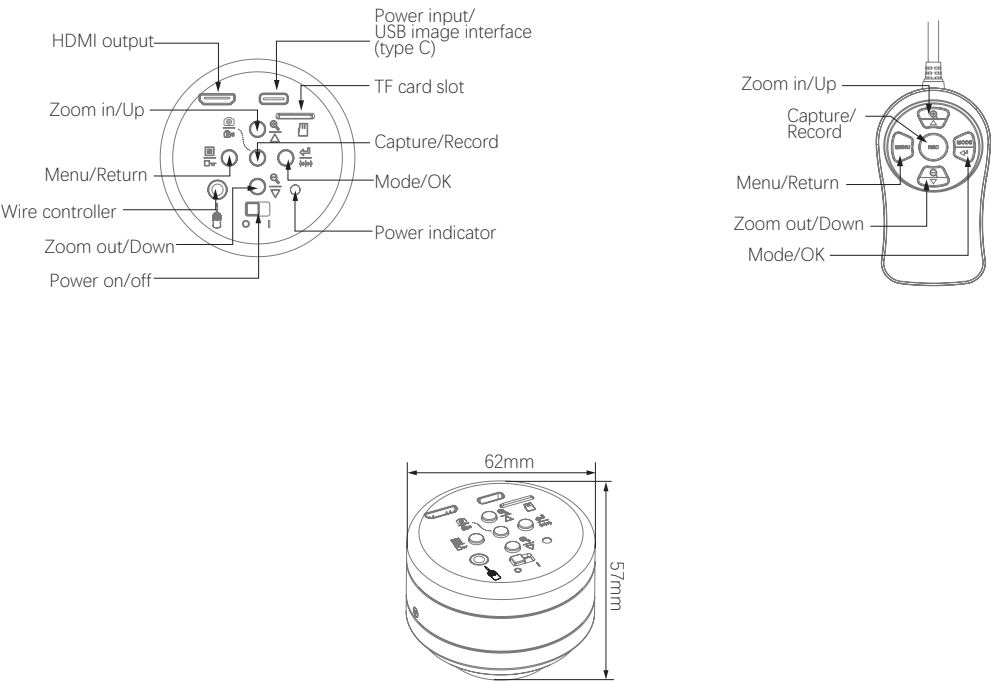
### Features & Benefits

- Ultra-wide dynamic range and ultra-low-light sensitive
- Equipped with 12.5-inch 1080P high-definition display
- When starting up, it will image instantly and automatically
- Built-in biological / industrial switchable working modes
- Built-in adaptable LED / halogen lamp light source options
- Display can be rotated vertically 180° and horizontal 270°
- Wired remote controller to reduce work intensity
- All powered by one HDMI cable directly

# Specifications

Product model	HDMI-210
Resolution	2.1 MP (1920x1080)
Sensor type	SONY CMOS IMX291
Shutter type	Electronic rolling shutter
Sensor size	1/2.8"
Pixel size	2.9μm x 2.9μm
Dynamic range	128dB
SNR	30dB
Spectral response	380~650nm
Exposure	Real-time Automatic, Single Automatic, Manual
White balance	Real-time Automatic, Single Automatic, Manual R, G, B adjustment
Frame rate	HDMI: 1920X1080P30, 1280x720P60
Record format	Image capture format: JPG; Resolution: 2592x1944, 1920x1080, 1024x768, 640x480 Video record format: MOV; Resolution: 1920x1080, 1280x720
Record Path	TF Card (Up to 128G), hot plug
Power supply	USB-type-C, DC5V / 1A
Image output	HDMI type C (mini HDMI)

# Dimensions





## Dual Output HDMI & USB Camera

Cost-effective dual output camera with rear focus knob to extend working distance.



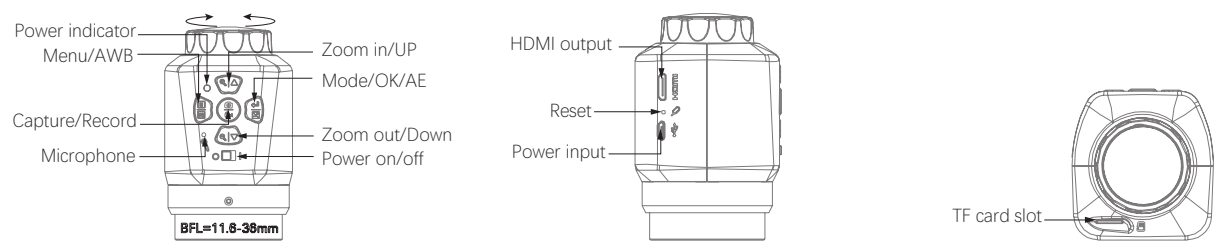
### Features & Benefits

- High performance and price ratio
- Rear focus mode adapts to mainstream monocular lens to extend working distance
- USB high speed video transmission
- Local storage supports up to 64G, hot-plug TF card
- Pixit Pro software with measurement and image processing tools

# Specifications

Product model	DM350-C
Resolution	3.5 MP (1920x1080)
Sensor type	Aptina CMOS AR0330
Shutter type	Electronic rolling shutter
Sensor size	1/3"
Pixel size	2.2μm x 2.2μm
Dynamic range	69.5dB
SNR	39dB
Spectral response	380~650nm
Exposure	Real-time Automatic, Single Automatic, Manual
White balance	Real-time Automatic, Single Automatic, Manual R, G, B adjustment
Frame rate	HDMI: 1920X1080i60, 1920X1080P30, 1280x720P60, 640x480P60
Record format	Image capture format: JPG HDMI mode: 2304x1536, 1920x1080, 1280x720, 640x480; USB mode: 1920x1080, 1280x720, 640x480  Video record format: MOV HDMI mode: 1920x1080, 640x480 USB mode: 1920x1080, 1280x720, 640x480
Record Path	HDMI mode: TF Card (Up to 64G), hot plug USB mode: PC
Power supply	HDMI mode: DC5.0V/1A USB mode: powered by PC

# Dimensions





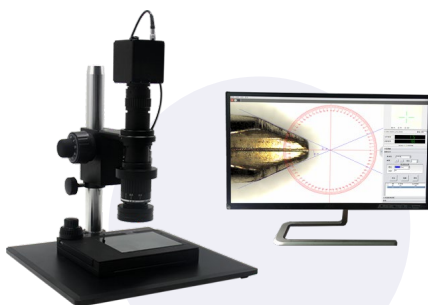
## Industrial Inspection HDMI & 4K Camera

Full HD and 4K UHD cameras specially designed for industrial inspection, 1080P at 60 fps and 4K at 30 fps.

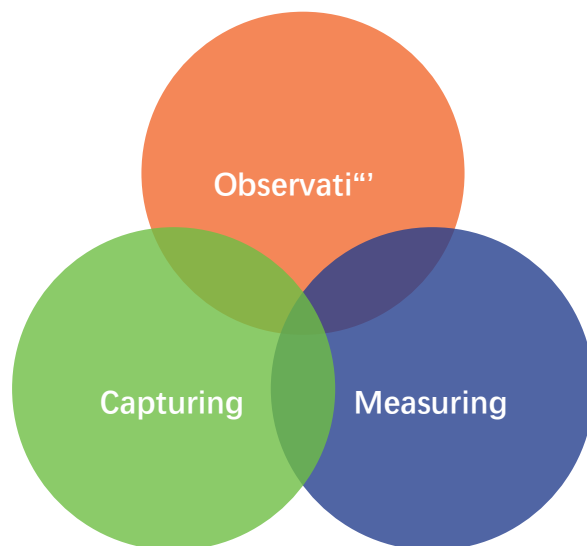


### Features & Benefits

- 1080P full HD (or 4K) live image output
- 60 fps live image without smear
- Connects directly to an HD monitor (or 4K display) with HDMI input
- Multiple crosshair for quick gaging
- Embedded measuring software (for measuring camera)
- Multiple measurement tools such as lines, circles and radius available in manual tab (for measuring camera)
- Live/ freeze image function
- Built-in cross line graphics: up to 8 overlay lines adjustable and 6 color options
- Aluminum CNC processing housing







## Applications

- IC package inspection
- Color recognition judgment
- Solder joint inspection
- PCB placement leakage detection
- Screw inspection
- LED defeat inspection
- Artifact inspection
- Jewelry Inspection
- Flexible PCB inspection
- Tool wear detection
- Other optical pattern inspection



## Specifications

Camera model	HDMI-200EN	HDMI-200	HDMI-201EN	HDMI-201	HDMI-201M	HDMI-800EN	HDMI-800	HDMI-800M
Camera type	Observation	Capture/ Storage	Observation	Capture/ Storage	Measurement	Observation	Capture/ Storage	Measurement
Resolution	1920x1080		1920x1080			3840x2160 (4K)		
Sensor size	1/3"		1/2"			1/1.7"		
Pixel size	2.75μm x 2,75μm		3.75μm x 3.75μm			1/85μm x 1.85μm		
Frame rate	60 fps		60 fps			30 fps		
Color depth	12:12:12 RGB		12:12:12 RGB			12:12:12 RGB		
Exposure	Automatic, manual							
White balance	Automatic, manual RGB adjustable							
Operation	Navigation button	USB Mouse	Navigation button	USB Mouse		Navigation button	USB Mouse	
Fiducial line	8 movable lines with color setting							
Power input	DC 12V, 2A							
Output interface	HDMI					HDMI, only recognize 4K display		
Capture & storage	N/A	U-disk storage	N/A	U-disk storage	U-disk storage	N/A	U-disk storage	U-disk storage
Built-in Measurement*	N/A	N/A	N/A	N/A	Available	N/A	N/A	Available
Dimension (mm)	65x51x51	67x61x61	65x51x51	67x61x61	67x61x61	65x51x51	93x66x47	93x66x47



## Low Magnification HDMI Microscope

Integrated with 12.5-inch high definition display and dual LED ring lights for free adjustment.



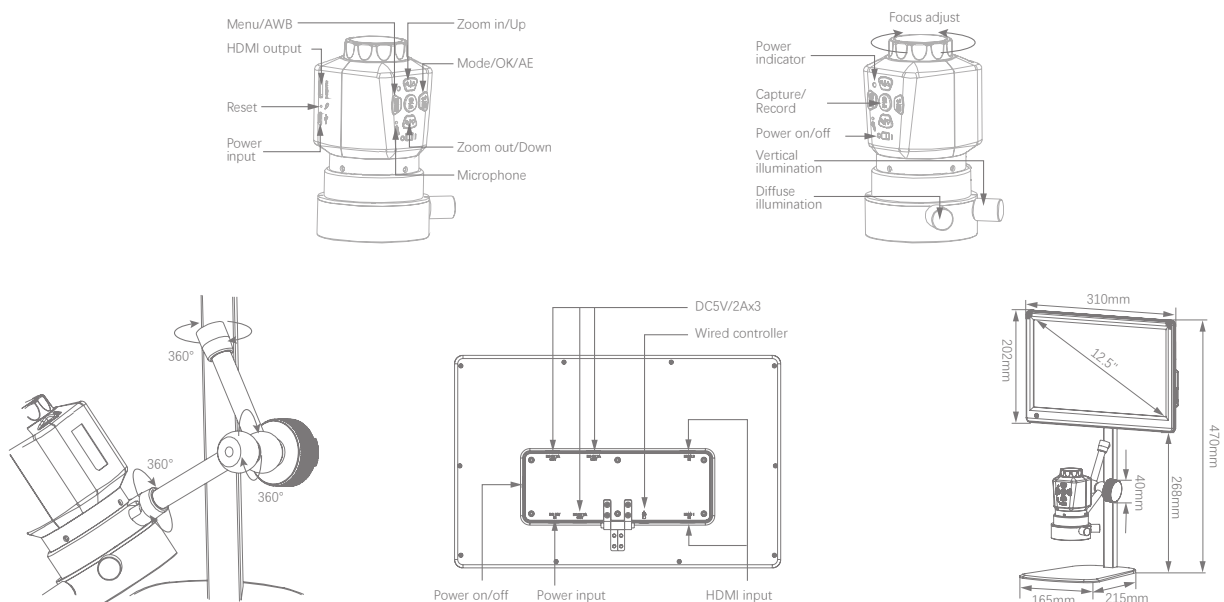
### Features & Benefits

- 12.5-inch 1080P high-definition display
- Built-in multifunctional image processing software
- Back focus mode extends working distance, range 33~320mm
- Ergonomic design, 360° universal pivot bracket, hovering freely
- Comprehensive magnification 4.8~55x (based on measurement on the 12.5" display)
- Independent control of two ring lights, free combination adjustment
- Monitor angle can be adjusted finely, elevation  $\leq 90^\circ$  or depression  $\leq 24^\circ$

## Specifications

Product model	HD32
Camera resolution	3.5 MP (1920x1080)
Sensor type	Aptina CMOS AR0330
Shutter type	Electronic rolling shutter
Sensor size	1/3"
Pixel size	2.2μm x 2.2μm
Dynamic range	69.5dB
SNR	39dB
Spectral response	380~650nm
Exposure	Real-time Automatic, Single Automatic, Manual
White balance	Real-time Automatic, Single Automatic, Manual R, G, B adjustment
Frame rate	HDMI: 1920X1080i60, 1920X1080P30, 1280x720P60, 640x480P60 Automatically fit to display
Record format	Image capture format: JPG; 2304x1536, 1920x1080, 1280x720, 640x480; Video record format: MOV; 1920x1080, 640x480
Record Path	HDMI mode: TF Card (Up to 64G), hot plug
Power supply	Adapter: Input: AC100~240V/50~60Hz; Output: DC12V/5A/60W Display: USB-A-Output: DC5V2Ax3
Working distance	33~320mm
Depth of field	7~0.8mm
Magnification	4.8~55x (Actual measurement based on 12.5" display screen)
Field of view	5x2.8mm (Max. 55x)~57x32mm (Min.4.8x)
Screen size	12.5-inch
Screen type	a-Si TFT-LCD / IPS / Foggy
Resolution	1920x1080
Display color	16.7M
Brightness	300 Nit
Contrast	800:1
Visual angle	Horizontal/vertical: 170°
Power supply	Adapter: Input AC100~240V, 50~60Hz; Output: DC12V 5A 60W Monitor: USB-A-Output: DC5V / 2Ax3
Image input	HDMI1, HDMI2
Image output	HDMI Type C (Mini HDMI)

## Dimensions





## Continuously Zoom HDMI Microscope

Digital zoom inspection microscope with 3D lighting and dual focus.



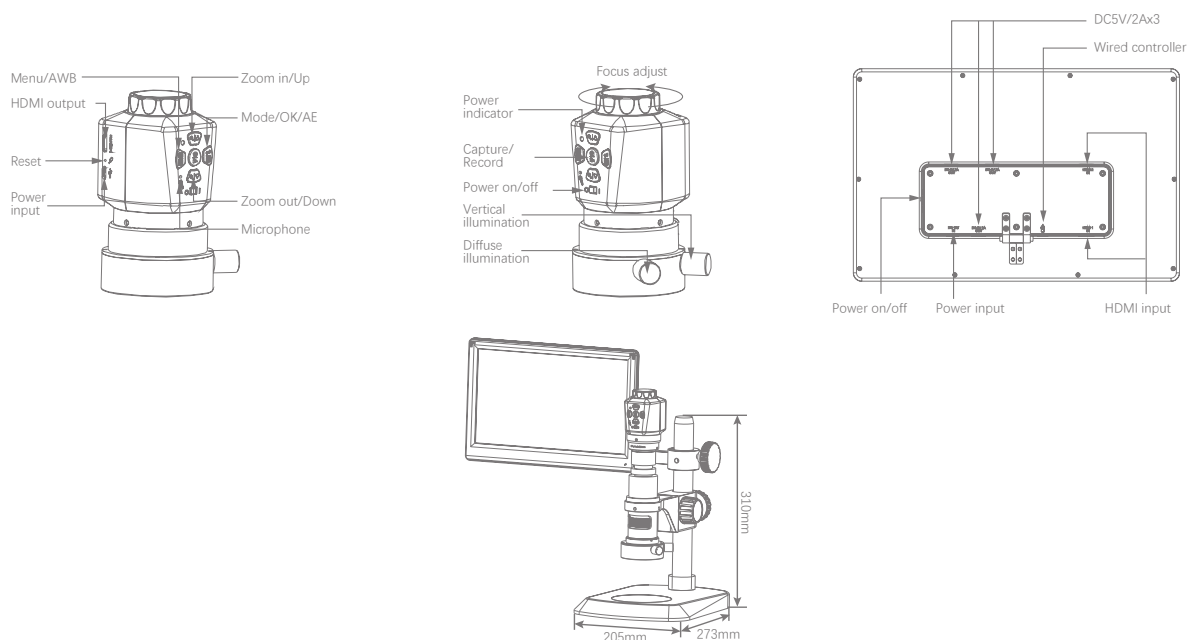
### Features & Benefits

- 12.5-inch 1080P high-definition display
- Built-in multifunctional image processing software
- Back focus mode extends working distance, range 0~232.5mm
- Ergonomic design, 360° universal pivot bracket, hovering freely
- 0.7~5X high definition optical lens, continuous zoom
- Comprehensive magnification 9.5~120x (based on measurement on the 12.5" display)
- Independent control of two ring lights, free combination adjustment.
- Monitor angle can be adjusted finely, elevation  $\leq 90^\circ$  or depression  $\leq 24^\circ$

## Specifications

Product model	HC52-C
Camera resolution	3.5 MP (1920x1080)
Sensor type	Aptina CMOS AR0330
Shutter type	Electronic rolling shutter
Sensor size	1/3"
Pixel size	2.2μm x 2.2μm
Dynamic range	69.5dB
SNR	39dB
Spectral response	380~650nm
Exposure	Real-time Automatic, Single Automatic, Manual
White balance	Real-time Automatic, Single Automatic, Manual R, G, B adjustment
Frame rate	HDMI: 1920X1080i60, 1920X1080P30, 1280x720P60, 640x480P60 Automatically fit to display
Record format	Image capture format: JPG; 2304x1536, 1920x1080, 1280x720, 640x480; Video record format: MOV; 1920x1080, 640x480
Record Path	HDMI mode: TF Card (Up to 64G), hot plug
Power supply	Adapter: Input: AC100~240V/50~60Hz; Output: DC12V/5A/60W Display: USB-A-Output: DC5V2Ax3
Working distance	0~232.5mm
Depth of field	5.5~0.27mm
Zoom ratio	0.7~5x
Magnification	9.5~120x (Actual measurement based on 12.5" display screen)
Field of view	31.6x17.7mm (Max. 55x)~2.3x1.3mm (Min.4.8x)
Screen size	12.5-inch
Screen type	a-Si TFT-LCD / IPS / Foggy
Resolution	1920x1080
Display color	16.7M
Brightness	300 Nit
Contrast	800:1
Visual angle	Horizontal/vertical: 170°
Power supply	Adapter: Input AC100~240V, 50~60Hz; Output: DC12V 5A 60W Monitor: USB-A-Output: DC5V / 2Ax3
Image input	HDMI1, HDMI2
Image output	HDMI Type C (Mini HDMI)

## Dimensions





## Large Field of View HDMI Microscope

Digital zoom inspection microscope with 3D lighting and dual focus, integrated with articulating arm, provides large field of view.



### Features & Benefits

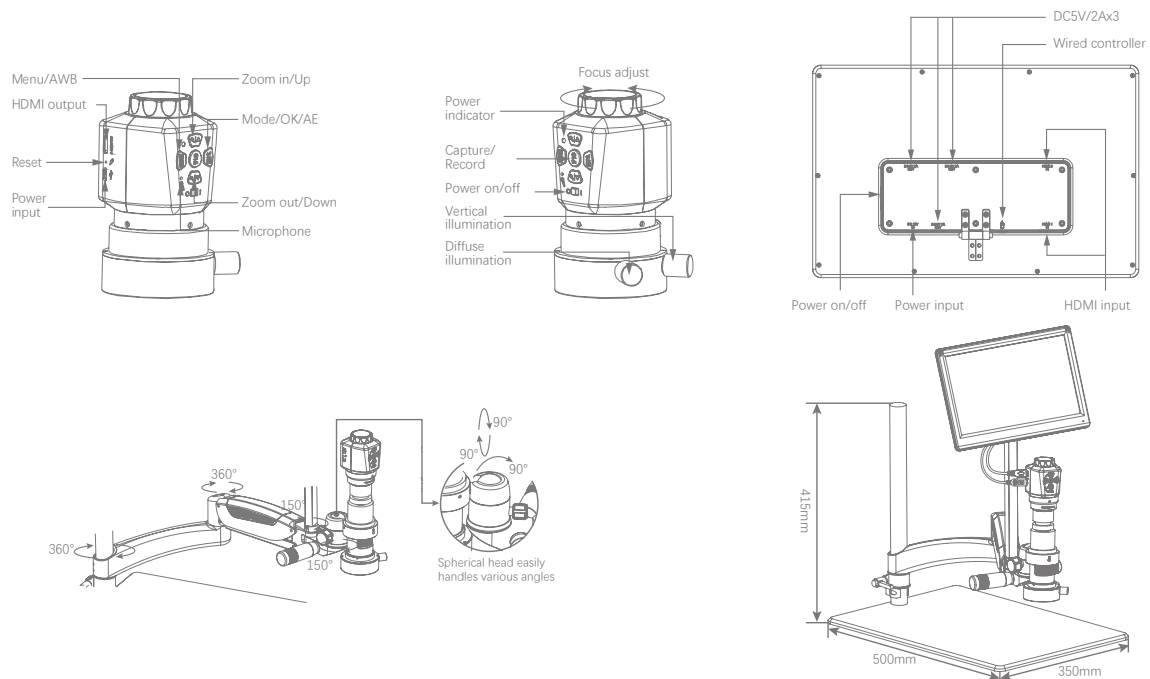
- 12.5-inch 1080P high-definition display
- Built-in multifunctional image processing software
- Back focus mode extends working distance, range 33~320mm
- Ergonomic design, 360° universal pivot bracket, hovering freely
- Comprehensive magnification 4.8~55x (based on measurement on the 12.5" display)
- Independent control of two ring lights, free combination adjustment
- Monitor angle can be adjusted finely, elevation  $\leq 90^\circ$  or depression  $\leq 24^\circ$



## Specifications

Product model	HC62
Camera resolution	3.5 MP (1920x1080)
Sensor type	Aptina CMOS AR0330
Shutter type	Electronic rolling shutter
Sensor size	1/3"
Pixel size	2.2μm x 2.2μm
Dynamic range	69.5dB
SNR	39dB
Spectral response	380~650nm
Exposure	Real-time Automatic, Single Automatic, Manual
White balance	Real-time Automatic, Single Automatic, Manual R, G, B adjustment
Frame rate	HDMI: 1920X1080i60, 1920X1080P30, 1280x720P60, 640x480P60 Automatically fit to display
Record format	Image capture format: JPG; Resolution: 2304x1536, 1920x1080, 1280x720, 640x480; Video record format: MOV; Resolution: 1920x1080, 640x480
Record Path	HDMI mode: TF Card (Up to 64G), hot plug
Power supply	Adapter: Input: AC100~240V/50~60Hz; Output: DC12V/5A/60W Display: USB-A-Output: DC5V2Ax3
Working distance	0~232.5mm
Depth of field	5.5~0.27mm
Zoom ration	0.7~5x
Magnification	4.8~55x (Actual measurement based on 12.5" display screen)
Field of view	5x2.8mm (Max. 55x)~57x32mm (Min.4.8x)
Screen size	12.5-inch
Screen type	a-Si TFT-LCD / IPS / Foggy
Resolution	1920x1080
Display color	16.7M
Brightness	300 Nit
Contrast	800:1
Visual angle	Horizontal/vertical: 170°
Power supply	Adapter: Input AC100~240V, 50~60Hz; Output: DC12V 5A 60W Monitor: USB-A-Output: DC5V / 2Ax3
Image input	HDMI1, HDMI2
Image output	HDMI Type C (Mini HDMI)

## Dimensions





# All-in-one HDMI Video Microscope

Integrated with ultra-wide dynamic camera and HDMI display, designed to improve operational convenience, suitable for various production inspections.

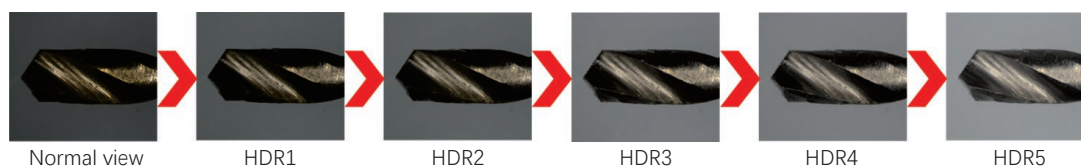


## Features & Benefits

- 1080P Full HD 60 fps real-time image without smear
- Integrated design, unified power supply for camera and light source
- One-button navigation and operation
- Connect directly to an HD monitor via HDMI input
- Five levels of HDR adjustment and three levels of edge enhancement adjustment
- Built-in cross line graphics: up to 8 overlay lines adjustable and 6 color options
- 0.7~5X high definition optical lens, continuous zoom
- 15.6 inch high definition display



## Five Levels of HDR Adjustable



## Specifications

Product model	HC201
Camera resolution	2.0 MP (1920x1080)
Sensor type	Sony CMOS IMX185
Shutter type	Electronic rolling shutter
Sensor size	1/2"
Pixel size	3.75μm x 3.75μm
Dynamic range	69.5dB
SNR	39dB
Spectral response	380~650nm
Exposure	Automatic, Manual
White balance	Automatic, Manual R, G, B adjustment
Frame rate	HDMI: 1920X1080 @ 60fps
Power supply	Adapter: AC100~240V/50~60Hz; Display: DC12V/2A
Working distance	105mm
Objective lens	1.0 X
Zoom ratio	0.7 ~ 5X
Field of view	25.7x14.5mm ~ 3.6x2.0mm
Optional objective	0.5 X (W.D.: 198mm); 2.0 X (W.D.: 46mm)



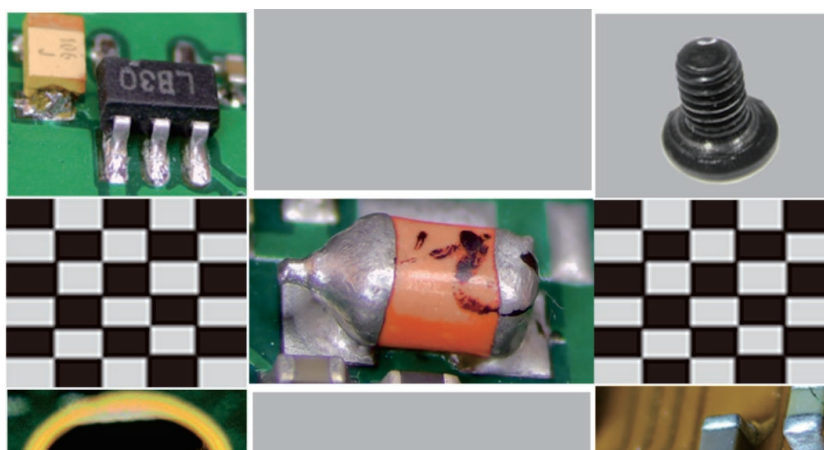
# 3D HDMI Video Microscope

Integrated with ultra-wide dynamic camera and HDMI display, designed to improve operational convenience, suitable for various production inspections.



## Features & Benefits

- 1080P Full HD 60 fps real-time image without smear
- 2D / 3D switching at random, 360-degree rotation observation
- Connect directly to HD monitor, no PC required
- Large depth of field, high resolution, no vignetting
- Five levels of HDR adjustment and three levels of edge enhancement adjustment
- Built-in cross line graphics: up to 8 overlay lines adjustable and 6 color options
- 0.7~5X high definition optical lens, continuous zoom
- 15.6 inch high definition display



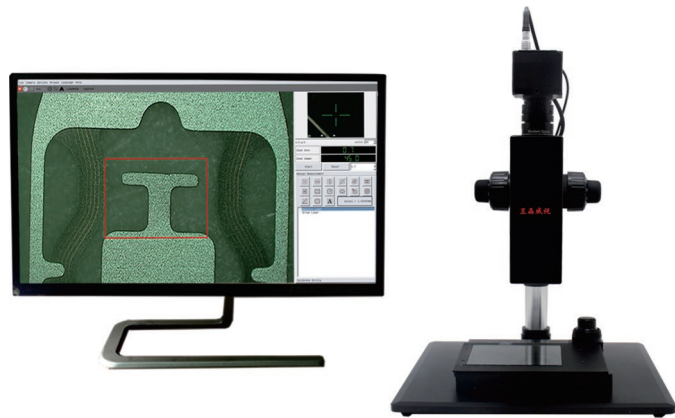
## Specifications

Product model	HC200-3D
Camera resolution	2.0 MP (1920x1080)
Sensor type	Sony CMOS IMX185
Shutter type	Electronic rolling shutter
Sensor size	1/2"
Pixel size	3.75μm x 3.75μm
Dynamic range	69.5dB
SNR	39dB
Spectral response	380~650nm
Exposure	Automatic, Manual
White balance	Automatic, Manual R, G, B adjustment
Frame rate	HDMI: 1920X1080 @ 60fps
Storage format	BMP, JPG
Storage path	U-disk
Power supply	Adapter: AC100~240V/50~60Hz; Display: DC12V/2A
3D effect	large depth of field, viewing angle 45°
Working distance	86mm
Objective lens	1.0 X
Zoom ratio	0.6~5 X
Field of view	12x6.75mm ~ 1.44x0.82mm
Magnification	30~250X
Illumination	Led ring light with 4 zones control



## Motorized Zoom Auto-calibration Measuring Microscope

Smart auto calibration, measurement accuracy 1  $\mu\text{m}$ , automatic edge detection



### Features & Benefits

- 1080P Full HD 60 fps real-time image without smear
- Built-in angle gauge, graticule, built-in drawing and screen printing functions, customizable templates
- 0.75~4.5X high definition motorized zoom, real-time display of optical magnification
- Can measure any geometry, measurement accuracy 1  $\mu\text{m}$
- Mouse control, automatic edge detection
- No PC required, no manual calibration required
- Built-in cross line graphics: up to 8 overlay lines adjustable and 6 color options



## Specifications

Product model	HC206A
Camera resolution	2.0 MP (1920x1080)
Sensor type	Sony CMOS IMX185
Shutter type	Electronic rolling shutter
Sensor size	1/2"
Pixel size	3.75μm x 3.75μm
Dynamic range	69.5dB
SNR	39dB
Spectral response	380~650nm
Exposure	Automatic, Manual
White balance	Automatic, Manual R, G, B adjustment
Frame rate	HDMI: 1920X1080 @ 60fps
Zoom type	Motorized zoom
Calibration	Automatic calibration by software
Measurement tools	Point, Straight line, Angle, Rectangle, Circle, Curve, etc.
Screen printing drawing	Draw and edit arbitrary graphics for comparison measurements
Storage format	BMP, JPG
Storage path	U-disk
Power supply	Adapter: AC100~240V/50~60Hz; Display: DC12V/2A
3D effect	large depth of field, viewing angle 45°
Working distance	86mm
Objective Lens	1.0 X
Zoom ratio	0.75~4.5 X
Field of view	9.6x5.4mm ~ 1.6x0.9mm
Magnification	35~225 X
XY Stage	Manual XY stage: 160x187x25mm

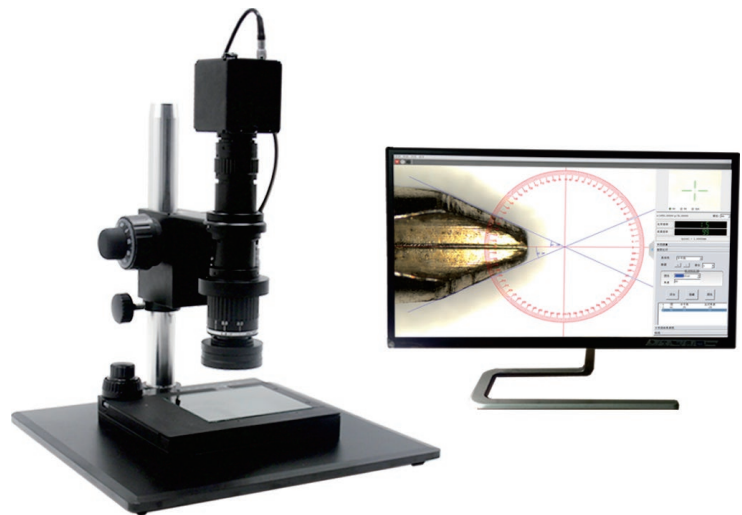
## Optional Objective Lens

Lens type	Magnification	Numerical aperture	Working distance
Auxiliary objective lens	0.3 X	/	270 mm
Auxiliary objective lens	0.5 X	/	170 mm
Auxiliary objective lens	0.6 X	/	130 mm
Auxiliary objective lens	1.5 X	/	52 mm
Auxiliary objective lens	2 X	/	39 mm
Long working distance APO objective	2 X	0.06	34.6 mm
Long working distance APO objective	3.5 X	0.1	40.9 mm
Long working distance APO objective	5 X	0.13	44.5 mm
Long working distance APO objective	10 X	0.28	34 mm
Long working distance APO objective	20 X	0.29	31 mm
Long working distance APO objective	50 X	0.42	20.1 mm
Long working distance APO objective	100 X	0.55	12.6 mm
Infinity plan objective	5 X	0.12	26.1 mm
Infinity plan objective	10 X	0.25	20.2 mm
Infinity plan objective	20 X	0.4	8.8 mm
Infinity plan objective	40 X	0.6	3.98 mm
Infinity plan objective	50 X	0.7	3.68 mm
Infinity plan objective	60 X	0.75	1.22 mm
Infinity plan objective	80 X	0.8	1.25 mm
Infinity plan objective	100 X	0.85	0.4 mm



## Manual Zoom Auto-calibration Measuring Microscope

Smart auto calibration, measurement accuracy 2  $\mu\text{m}$ , automatic edge detection.



### Features & Benefits

- 1080P Full HD 60 fps real-time image without smear
- Built-in angle gauge, graticule, built-in drawing and screen printing functions, customizable templates
- 0.75~4.5X high definition manual zoom, real-time display of optical magnification
- Can measure any geometry, measurement accuracy 2  $\mu\text{m}$
- Mouse control, automatic edge detection
- No PC required, no manual calibration required
- Built-in cross line graphics: up to 8 overlay lines adjustable and 6 color options

## Specifications

Product model	HC206M
Camera resolution	2.0 MP (1920x1080)
Sensor type	Sony CMOS IMX185
Shutter type	Electronic rolling shutter
Sensor size	1/2"
Pixel size	3.75μm x 3.75μm
Dynamic range	69.5dB
SNR	39dB
Spectral response	380~650nm
Exposure	Automatic, Manual
White balance	Automatic, Manual R, G, B adjustment
Frame rate	HDMI: 1920X1080 @ 60fps
Zoom type	Manual zoom
Calibration	Automatic calibration by software
Measurement tools	Point, Straight line, Angle, Rectangle, Circle, Curve, etc.
Screen printing drawing	Draw and edit arbitrary graphics for comparison measurements
Storage format	BMP, JPG
Storage path	U-disk
Power supply	Adapter: AC100~240V/50~60Hz; Display: DC12V/2A
3D effect	large depth of field, viewing angle 45°
Working distance	86mm
Objective Lens	1.0 X
Zoom ratio	0.75~4.5 X
Field of view	9.6x5.4mm ~ 1.6x0.9mm
Magnification	35~225 X
XY Stage	Manual XY stage: 160x187x25mm

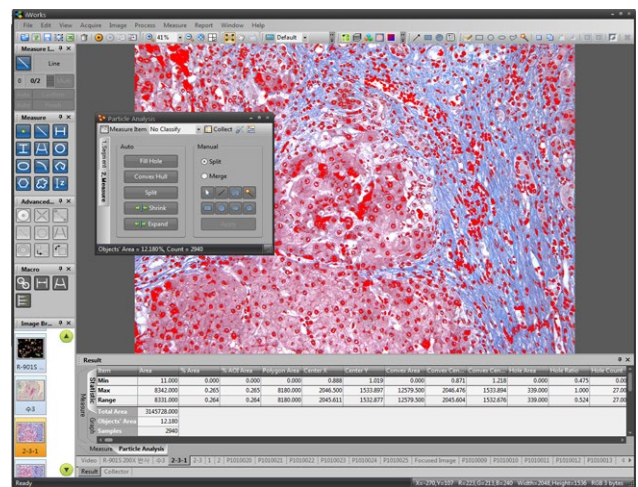
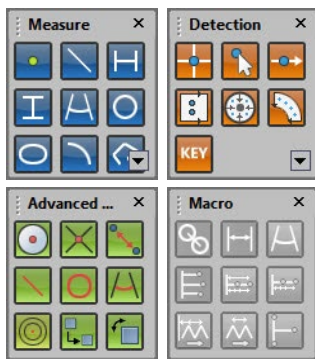
## Optional Objective Lens

Lens type	Magnification	Numerical aperture	Working distance
Auxiliary objective lens	0.3 X	/	270 mm
Auxiliary objective lens	0.5 X	/	170 mm
Auxiliary objective lens	0.6 X	/	130 mm
Auxiliary objective lens	1.5 X	/	52 mm
Auxiliary objective lens	2 X	/	39 mm
Long working distance APO objective	2 X	0.06	34.6 mm
Long working distance APO objective	3.5 X	0.1	40.9 mm
Long working distance APO objective	5 X	0.13	44.5 mm
Long working distance APO objective	10 X	0.28	34 mm
Long working distance APO objective	20 X	0.29	31 mm
Long working distance APO objective	50 X	0.42	20.1 mm
Long working distance APO objective	100 X	0.55	12.6 mm
Infinity plan objective	5 X	0.12	26.1 mm
Infinity plan objective	10 X	0.25	20.2 mm
Infinity plan objective	20 X	0.4	8.8 mm
Infinity plan objective	40 X	0.6	3.98 mm
Infinity plan objective	50 X	0.7	3.68 mm
Infinity plan objective	60 X	0.75	1.22 mm
Infinity plan objective	80 X	0.8	1.25 mm
Infinity plan objective	100 X	0.85	0.4 mm



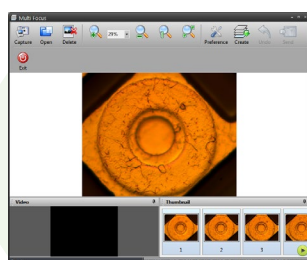
# iWorks I Series Microscopy Software

Streamlined microscopy software for imaging and analysis with user-friendly interface. Variety of solutions to image acquisition, measuring, counting, classify, and material analysis module such as particle analysis, cast iron, grain analysis, non-metallic inclusions, phase analysis.

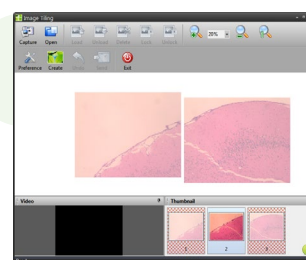


## Features & Benefits

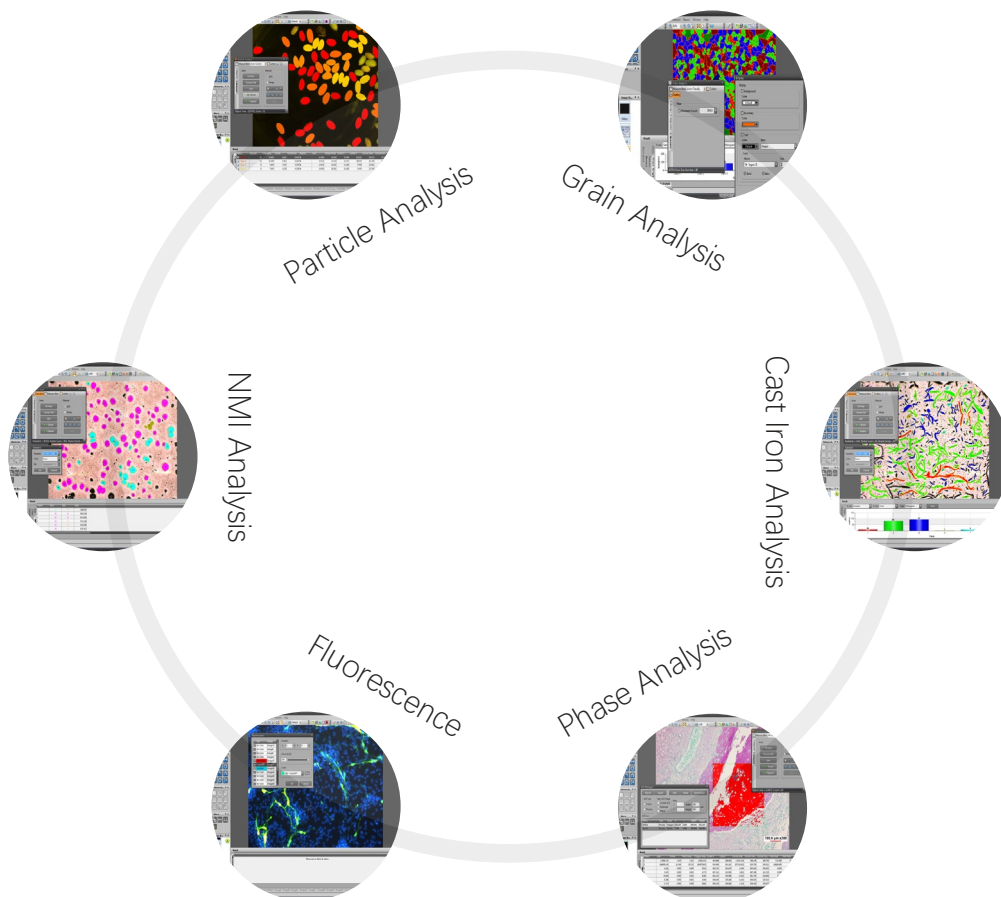
- Very user-friendly interface and modular design
- Image acquisition and measurement with variety of measurement tools
- Image tiling, multi-focus and image enhancement tools
- Strong compatibility for various cameras Interlocking with motorized stages enable precise work
- Measurement images and data can be automatically exported to Excel with custom report template design
- Particle analysis, grain analysis, cast iron analysis, non-metallic inclusions and phase analysis etc. for your materials research



Multi-focus



Imaging tiling



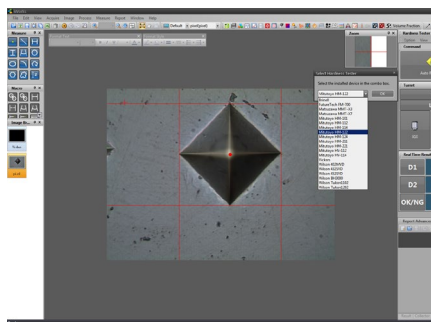
## Specifications

Software package	LITE	FX	FG	FC	Material
Basic measurement	●	●	●	●	●
Advanced measurement	○	○	●	●	●
Annotation	●	●	●	●	●
Manual calibration	●	●			
Auto calibration			●	●	●
Scale marker	●	●	●	●	●
Fixed macro	●	●			
Custom macro			●	●	●
Reflected light		●	●	●	●
3D plot	●	●	●	●	●
Background correction		●	●	●	●
Overlay chart	●	●	●	●	●
Time-lapse	●	●	●	●	●
Excel report	●	●	●	●	●
Split/merge planes	●	●	●	●	●
Fluorescence merge		●	●	●	●
Multi-focus	●	●	●	●	●
Stereoscopic multi-focus		●	●	●	●
Image tiling	●	●	●	●	●
AOI manager		●	●	●	●
Auto counting/classify		●	●	●	●
Object editing		●	●	●	●
Grain size analysis*			●		●
Cast iron analysis*				●	●
Non-metallic inclusions analysis*					●
Rust grade analysis					●
Phase analysis*					●
Report manager*					●
Optional plug-in		●			



# iWorks H Series Hardness Testing Software

Dedicated to the hardness tester that can measure the shape of the indenter such as Micro Vickers, Vickers, Loop, and Brinell.



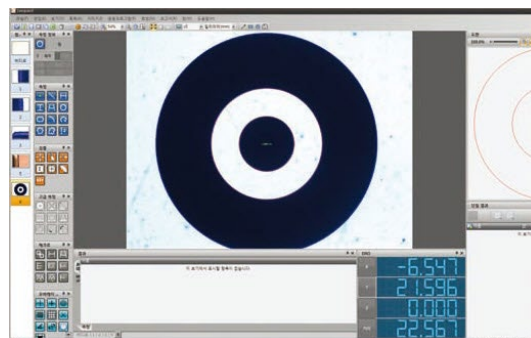
- Hardness tester dedicated software
- Supports automatic, manual and semi-automatic modes
- Accurate and convenient measurement
- By supporting various specifications, you can check the measurement data for each specification
- Provides various measurement tools and intuitive UX
- Automatically transfer measurement images and data to Excel
- User-defined report (report manager) function

## Specifications

Software package	HL	HS	HX	HXS
Basic measurement	●	●	●	●
Advanced measurement	○	○	●	●
Annotation	●	●	●	●
Manual calibration	●	●	●	●
Auto calibration			●	●
Scale marker	●	●	●	●
Fixed macro	●	●	●	●
Custom macro			●	●
Auto edge detection		●	●	●
Auto result revision		●	●	●
Remote control		●	●	●
Auto reading			●	●
Overlay chart	●	●	●	●
Excel report	●	●	●	●
Report manager			●	●
Auto stage				●



# iWorks M Series Software for Measuring Microscope



- High precise automated calibration
- Automatic edge detection tools
- Multi-focus and 3 D plot output
- Large area image tiling
- Compatible with Nikon MM, Mitutoyo MF, Olympus STM6, STM7 etc.



## Specifications

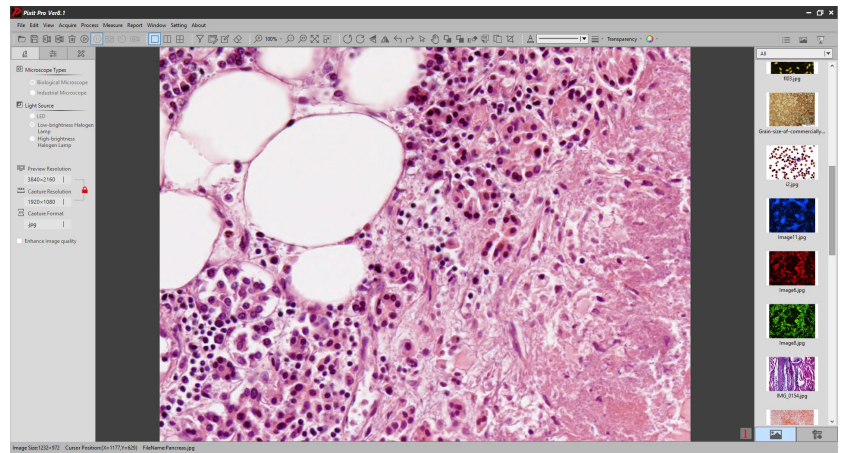
Software package	MMS	MMX
Basic measurement	●	●
Advanced measurement	●	●
Annotation	●	●
Auto calibration		
Scale marker	●	●
Custom macro	●	●
Auto edge detection		●
PCS/MCS	●	●
Alignment tools	●	●
Overlay chart	●	●
Excel report	●	●
Drawing window	●	●
Multi-monitor	●	●
Stereoscopic multi-focus		●
Image tiling		●





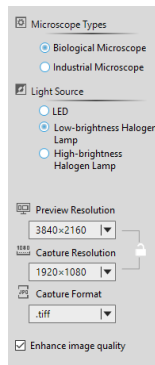
# Pixit Pro Image & Measuring Software

Standard microscopy imaging and measurement software included with the camera



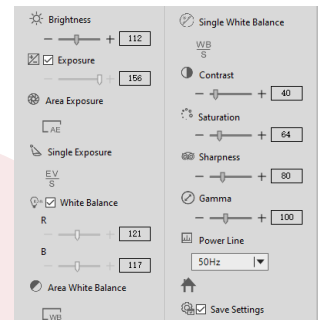
## Working mode setting

- Microscope types option
- Light source option
- Preview resolution setting
- Capture resolution setting
- Image format setting
- Enhance image quality



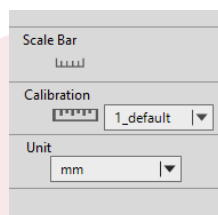
## Camera setting

- Exposure setting
- White balance setting
- Brightness, contrast, sharpness, saturation and gamma setting
- Power line setting
- Restore default settings
- Save settings



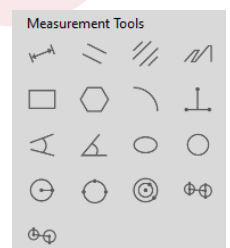
## Calibration & scale bar

- Scale bar setting
- Calibration tool
- Unit setting



## Measurement tools

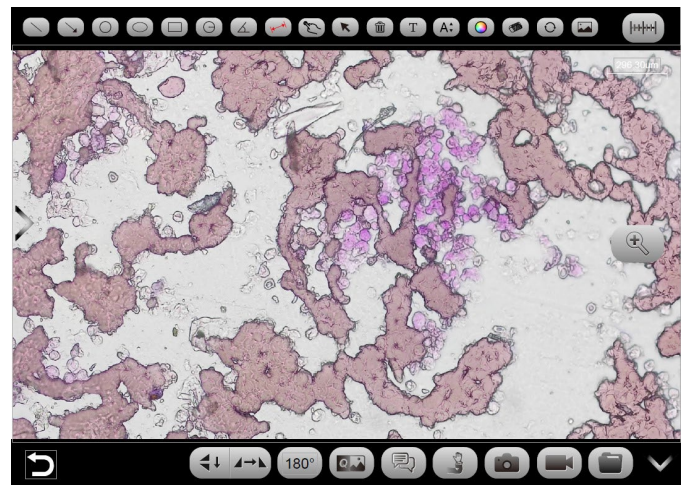
- 17 measurement tools



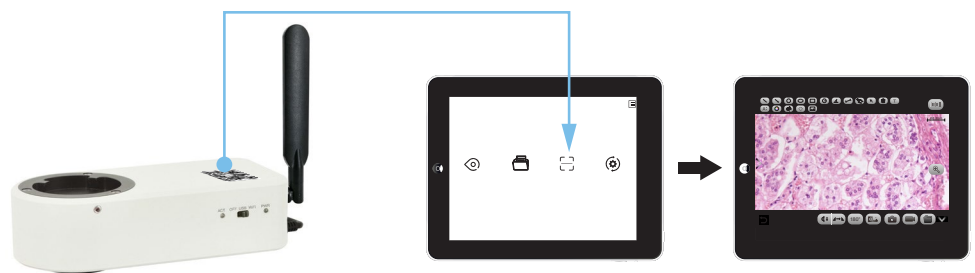


# KoPa WiFi Lab App for Smart Mobile Devices

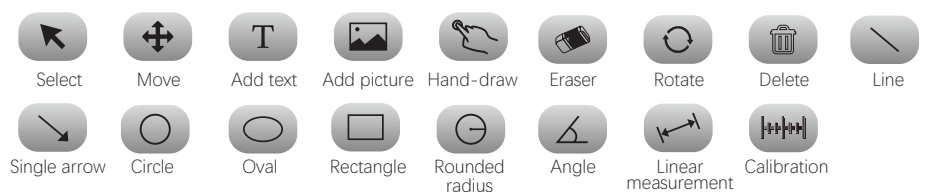
Compatible with iOS devices and Android devices such as mobile phone, tablet, TV, and interactive flat panel.



Scan QR code to connect

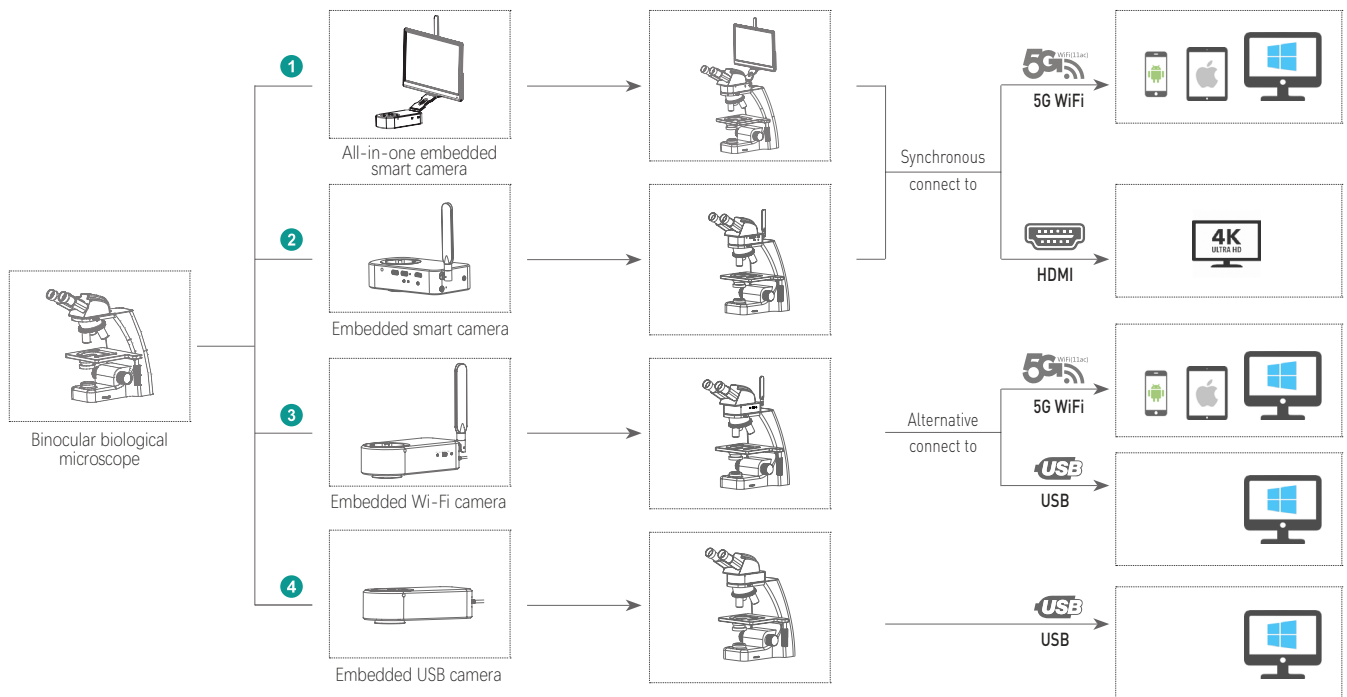


Annotation & measurement tools

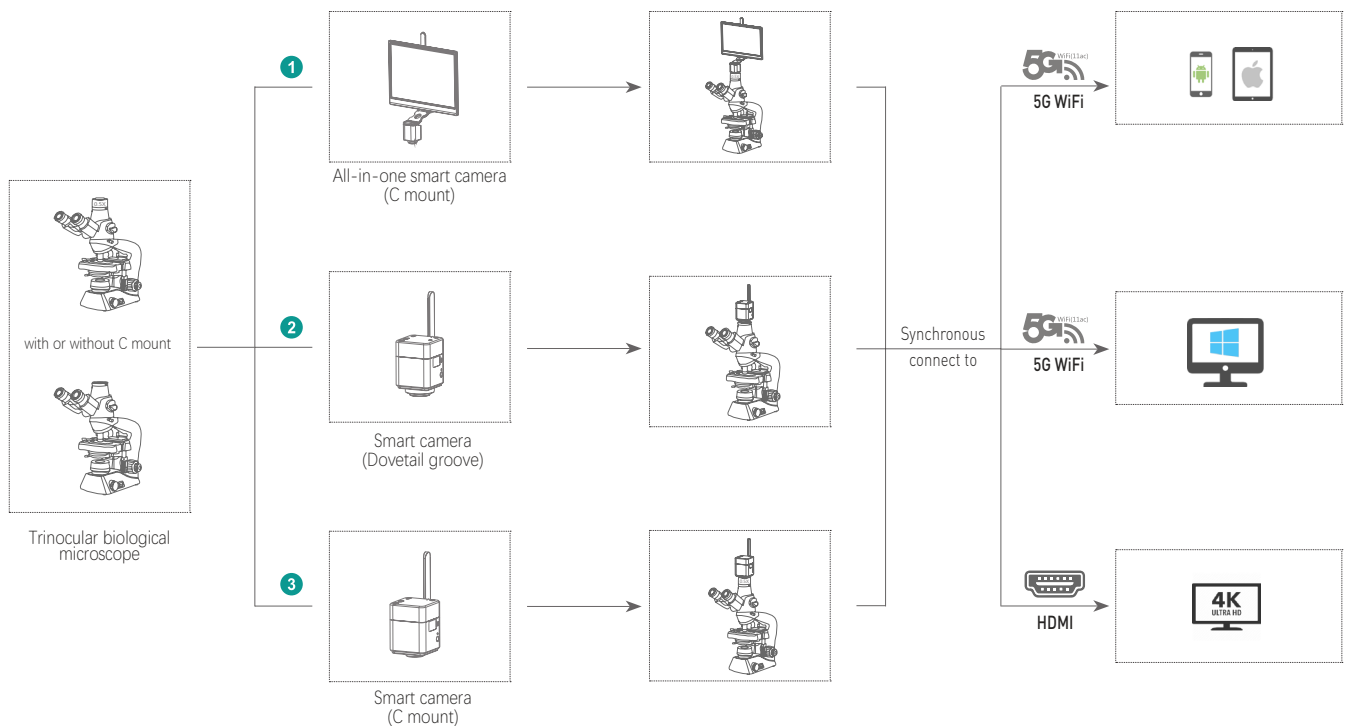


# Camera Solutions to Microscope - 1

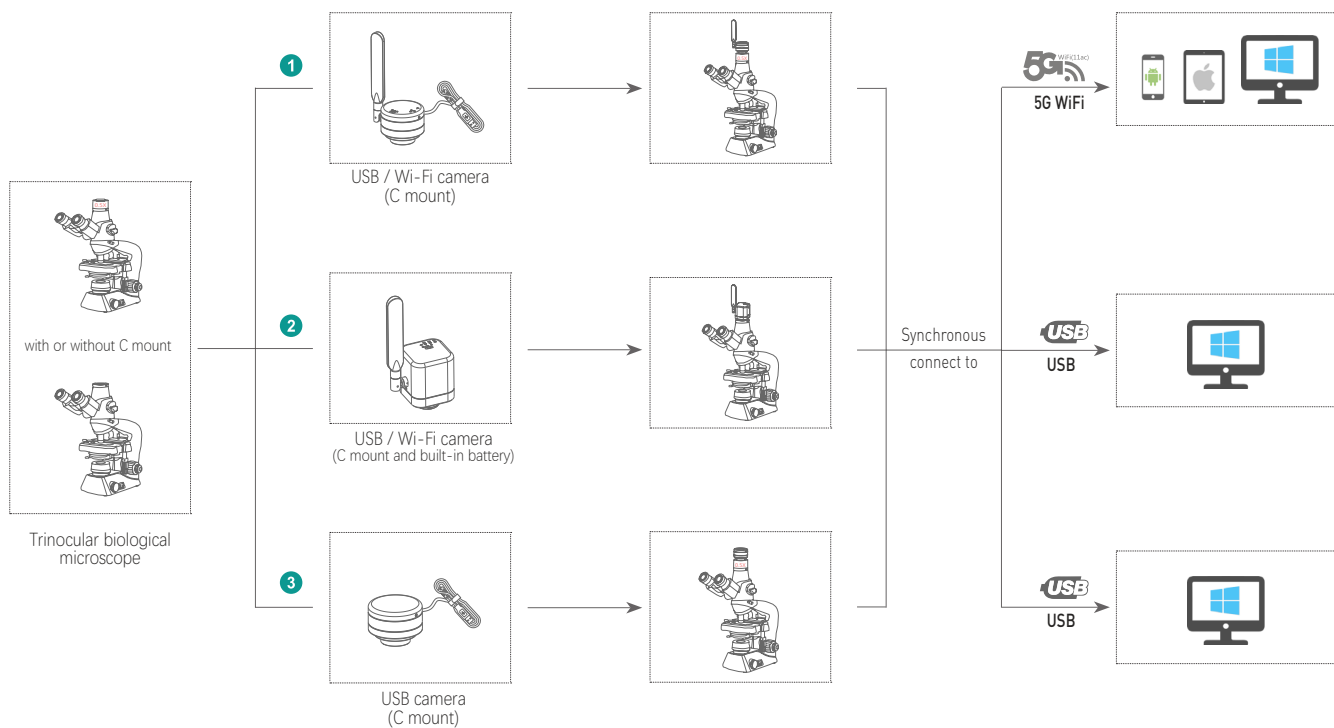
## Solutions for Binocular Biological Microscope



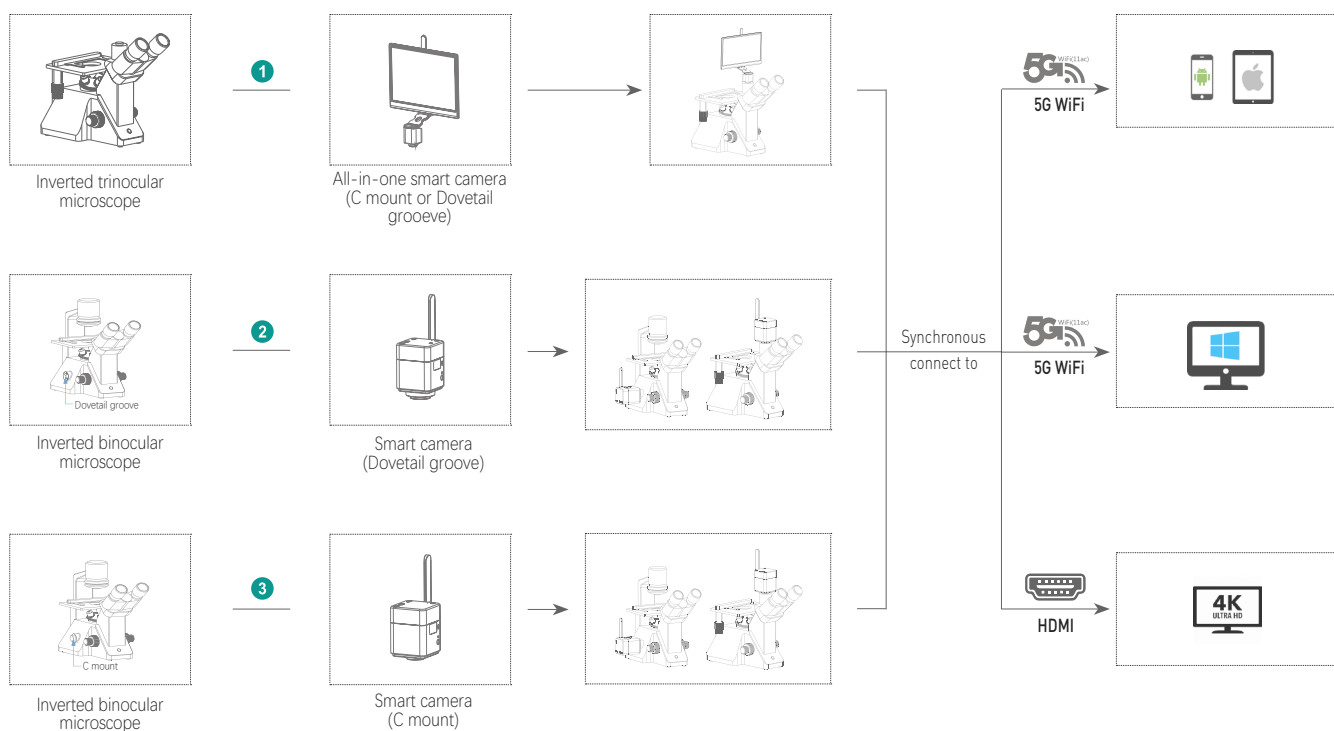
## Solutions for Trinocular Biological Microscope - 1



## Solutions for Trinocular Biological Microscope - 2

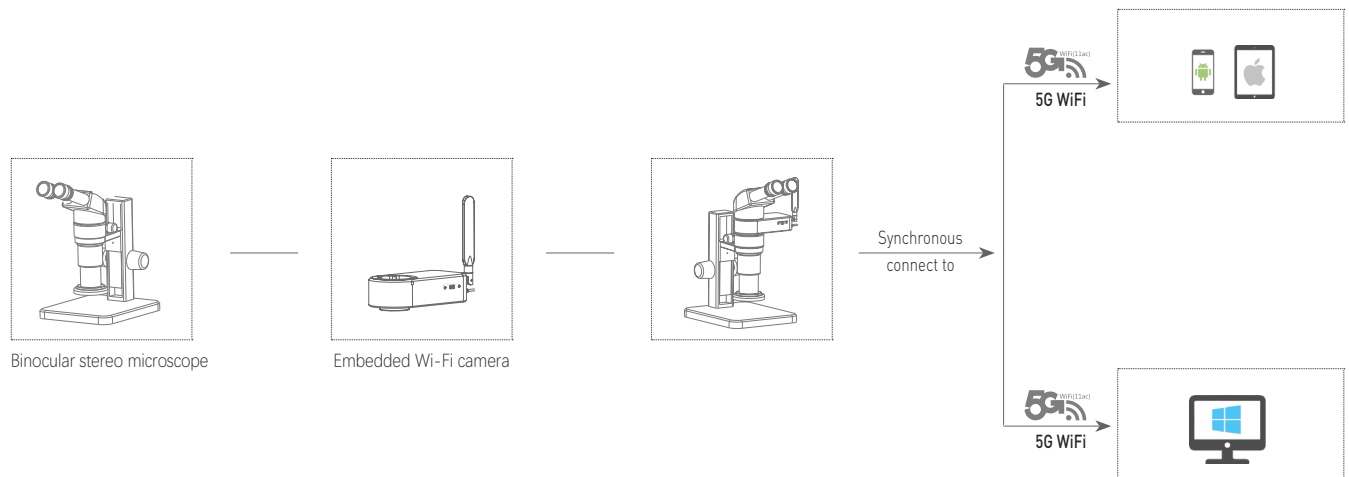


## Solutions for Inverted Microscope

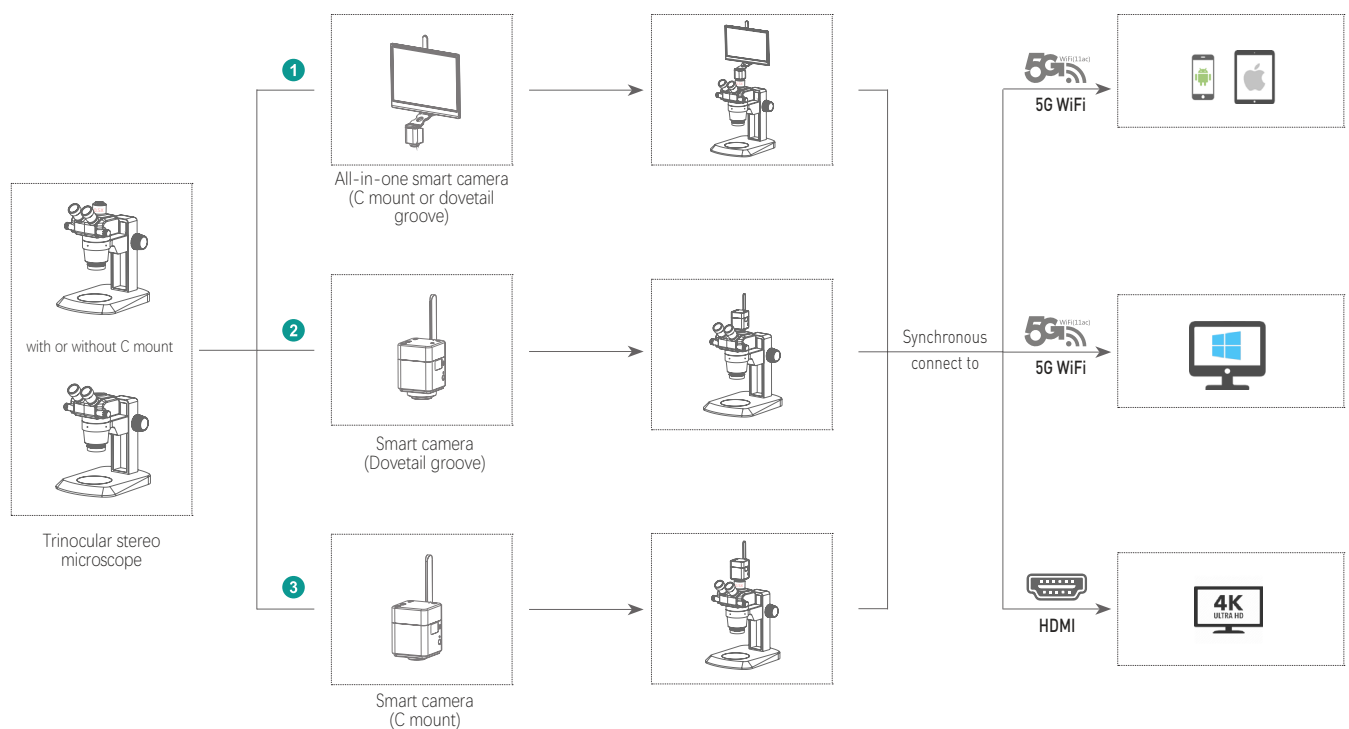


# Camera Solutions to Microscope - 2

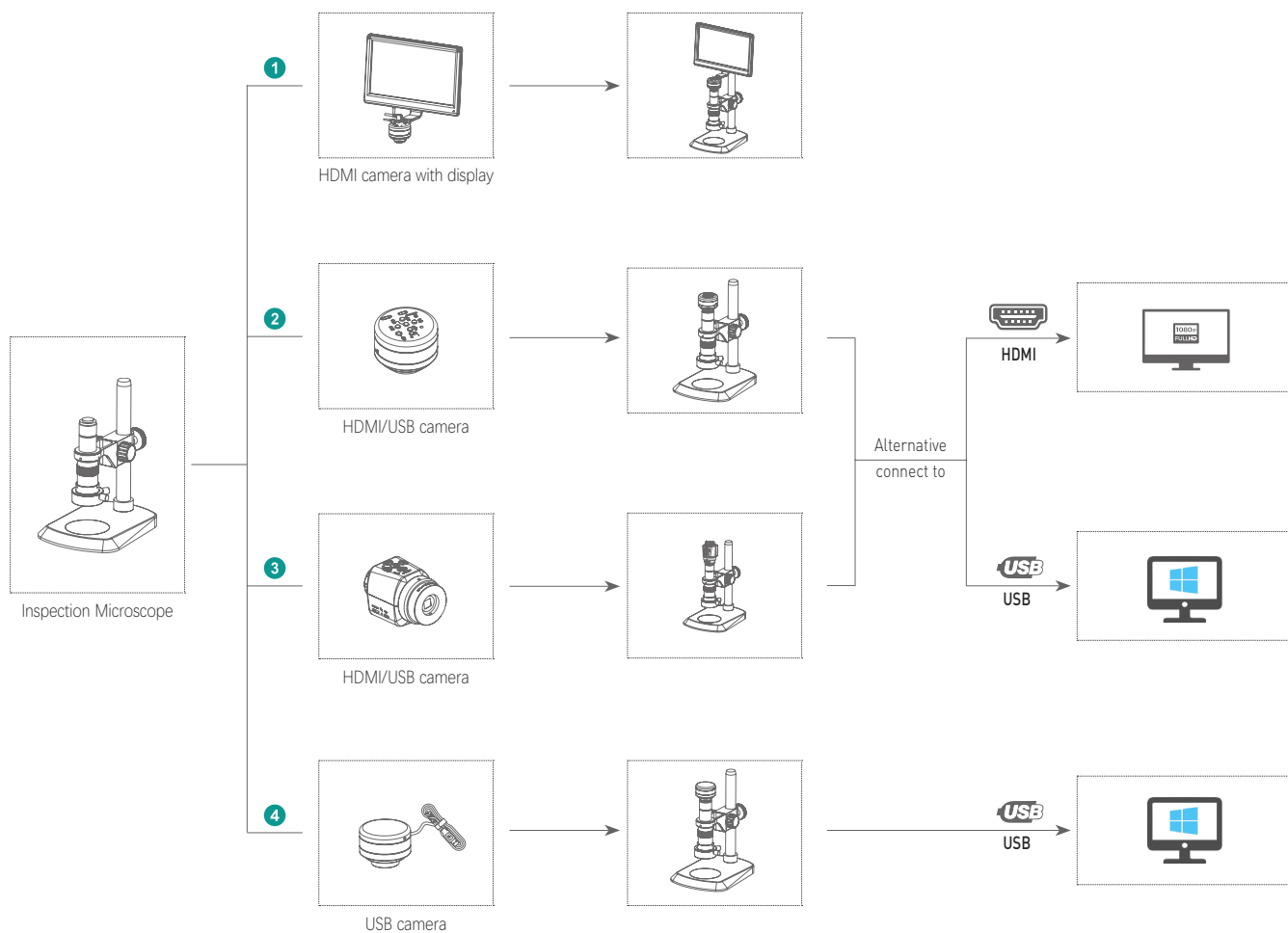
## Solutions for Binocular Stereo Microscope



## Solutions for Trinocular Stereo Microscope



## Solutions for Industrial Inspection





#### **LANOPTIK TECHNOLOGIES LTD**

Rm.1002, 140 Zhongshan Avenue, Guangzhou, 510630, China  
phone: +86 20 38986017; fax: +86 20 38476076  
<http://www.lanoptik.com>

#### **NAHWOO PRECISION CORP**

Trebo Officetel, No.104, 26-25 Uman-dong, Padal-gu, Suwon City, South Korea  
phone: +82 31893-8228; fax: +82 2 62803080  
<http://www.nahwoo.com>

#### **NAHWOO TRADING INTERNATIONAL LTD**

Rm.1103, Hang Seng Mongkok Building, 677 Nathan Rd., Monkok Kowloon, Hong Kong  
phone: +86 20 38986017; fax: +86 20 38476076