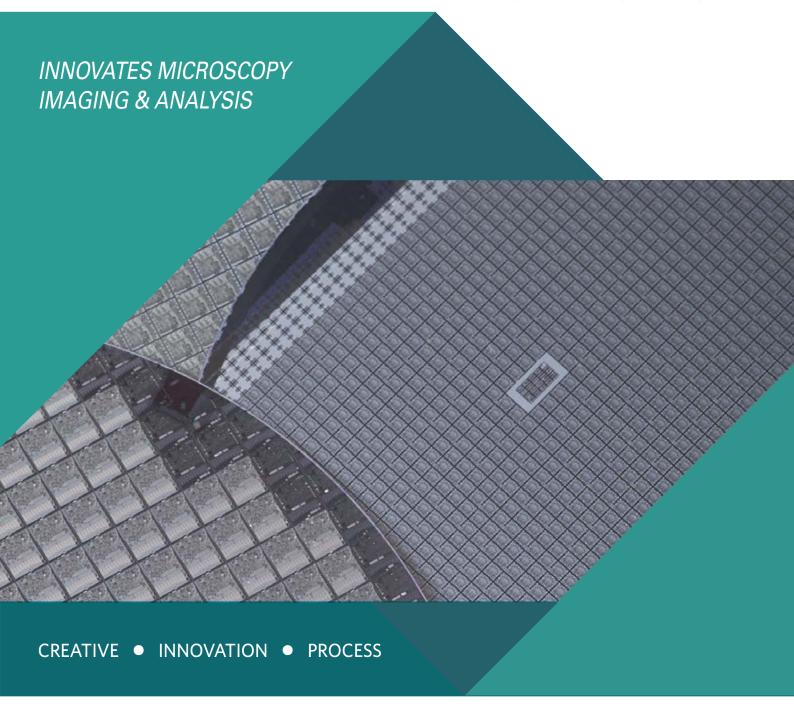


# LANOPTIK

CATALOG 2021





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.

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# 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

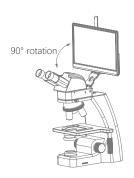
IMAGING IS EVERYTHING

Camera model	HE810	HE810-N	HE810-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 correspor	nding microscope			
Resolution		8.0 MP (3840x2)	160)			
Sensor type		SONY IMX334 C	MOS			
Shutter type		Electronic rolling s	shutter			
Sensor size		1/1.18"				
Pixel size		2.0µm × 2.0µn	n			
Dynamic range		72dB (Non-HDR r	node)			
SNR		≥ 56dB				
Spectral response		380~650nm	1			
Exposure		Realtime Automatic, Single A	utomatic, Manual			
White balance	Realt	ime Automatic, Single Automatic	c, Manual (R, B adjustable	)		
Frame rate		25fps @ 3840x2	2160			
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				

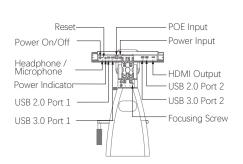
Camera model	HE1210	HE1210-N	HE1210-L	HE1210-Z		
Applicable microscope	Olympus CX series, BX series	Nikon E series, Ci/Ni series	Leica DM series	Zeiss Primo Star		
Coupler type		Dovetail groove of correspor	nding microscope			
Resolution		12.0 MP (4000x3	000)			
Sensor type		SONY IMX412 C	MOS			
Shutter type		Electronic rolling s	hutter			
Sensor size		1/2.3"				
Pixel size		1.55µm x 1.55 <sub>l</sub>	um			
Dynamic range		TBD				
SNR		TBD				
Spectral response		380~650nm	1			
Exposure		Realtime Automatic, Single A	utomatic, Manual			
White balance	Realt	ime Automatic, Single Automatic	c, 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				

<sup>\*</sup> For Nikon Ei Microscope, the models of camera are HE810-E and HE1200-E.













# **Embedded Smart Camera**

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





- 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

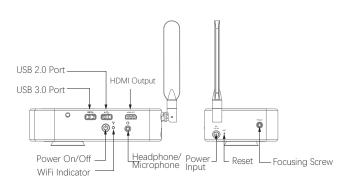
Camera model	TE800	TE800-N	TE800-L	TE800-Z	
Applicable microscope	Olympus CX series, BX series	Nikon E series, Ci/Ni series	Leica DM series	Zeiss Primo Star	
Coupler type		Dovetail groove of correspor	nding microscope		
Resolution		8.0 MP (3840x2)	160)		
Sensor type		SONY IMX334 C	MOS		
Shutter type		Electronic rolling s	shutter		
Sensor size		1/1.8"			
Pixel size		2.0µm x 2.0µn	n		
Dynamic range		> 72dB (Non-HDR m	node)		
SNR		≥ 56dB			
Spectral response		380~650nm	1		
Exposure		3.9ms~320ms, Automat	tic & Manual		
White balance		Real-time Automatic, Man	ual adjustment		
Frame rate		25fps @ 3840x	2160		
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		5.180~5.825G	Hz		

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 correspor	nding microscope		
Resolution		12.0 MP (4000x3	000)		
Sensor type		SONY IMX412 C	MOS		
Shutter type		Electronic rolling s	hutter		
Sensor size		1/2.3"			
Pixel size		1.55µm x 1.55 <sub>l</sub>	um		
Dynamic range		TBD			
SNR		TBD			
Spectral response		380~650nm	1		
Exposure		Real-time Automatic, Man	ual adjustment		
White balance		Real-time Automatic, Man	ual 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		5.180~5.825G	Hz		

<sup>\*</sup> For Nikon Ei Microscope, the models of camera are TE800-E and TE1200-E.











# **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.



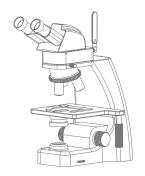


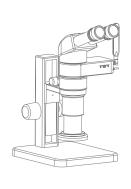
- Work seamlessly with a wide range of computing and mobile devices running most major operating systems, from Windows to iOS, and Android
- Wi-Fi and USB dual output for option by switch.
- WAN port available for long-distance transmission, through the network cable to connect a computer or router to 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

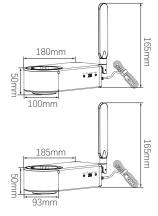
Camera model	CA800	CA800-BX	CA800-OT	CA800-Z	
Applicable microscope	Olympus CX series	Olympus BX series	Olympus SZX series	Zeiss Primo Star	
Coupler type		Dovetail groove of corr	esponding microscope		
Resolution		8.0 MP (38	340x2160)		
Sensor type		SONY IMX	334 CMOS		
Shutter type		Electronic ro	olling shutter		
Sensor size		1/1	8"		
Pixel size		2.0µm :	x 2.0µm		
Dynamic range		72dB (Non-	HDR mode)		
SNR		≥ 5	6dB		
Spectral response		380~6	50nm		
Exposure		3.9ms~320ms, Au	tomatic & Manual		
White balance		Realtime Automatic, Sir	ngle 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		

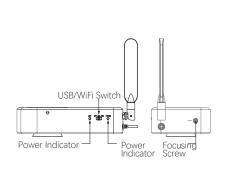
Camera model	CA800-N	CA800-NK	CA800-NT	CA800-L	
Applicable microscope	Nikon E series	Nikon Ci/Ni series	Nikon SMZ series	Leica DM series	
Coupler type		Dovetail groove of corr	responding microscope		
Resolution		8.0 MP (3	840x2160)		
Sensor type		SONY IMX	334 CMOS)		
Shutter type		Electronic ro	olling shutter		
Sensor size		1/1	1.8"		
Pixel size		2.0µm	x 2.0µm		
Dynamic range		72dB (Non-	HDR mode)		
SNR		≥ 5	i6dB		
Spectral response		380~6	650nm		
Exposure		3.9ms~320ms, Au	tomatic & Manual		
White balance		Realtime Automatic, Sir	ngle 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		

<sup>\*</sup> Model CA800-E available for Nikon Ei Microscope











# **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.

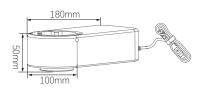


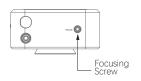
- USB high speed video transmission up to 30 fps at 8.3 megapixel
- Excellent auto white balance and color reduction
- Driver-free installation and plug and play, no fear of system upgrade and reinstallation
- Embedded 50%/50% light splitting design without damaging the original optical system
- Built-in 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

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 gr	oove of corresponding	g microscope		
Resolution			8.0 MP (3840x2160)			
Sensor type			SONY IMX334 CMOS			
Shutter type			Electronic rolling shutt	er		
Sensor size			1/1,8"			
Pixel size			2.0μm x 2.0μm			
Dynamic range			72dB (Non-HDR mode	e)		
SNR			≥ 56dB			
Spectral response			380~650nm	-		
Exposure		3.9ms	~320ms, Automatic &	Manual		
White balance		Realtime A	utomatic, Single Auton	natic, Manual		
Frame rate		30fps @ 3840x2160,	2592x1944, 1920x108	0, 1024x768, 640x480		
Record format	Image capture format: JPG, BMP, PNG, TIFF, PDF Resolution: 3840x2160, 2592x1944, 1920x1080, 1024x768, 640x480					
Record format	Video record format: MJPG format AVI file Resolution: 1920x1080, 1024x768, 640x480					
HDMI output		Automatically ac	lapt 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.











# 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.



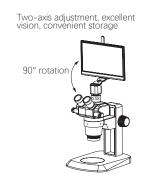


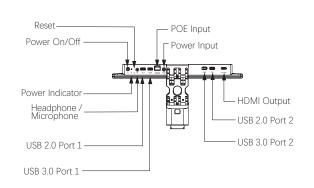
- Work seamlessly with a wide range of computing and mobile devices running most major operating systems, from Windows to iOS, and Android
- 15.6-inch full color gamut 4K UHD display ensures excellent image quality
- Come with imaging APP, automatically display live images after power on
- 32GB built-in 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

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 correspo	onding microscope or C N	Mount		
Resolution		8.0 MP (3840x)	2160)			
Sensor type		SONY IMX334	CMOS			
Shutter type		Electronic rolling	shutter			
Sensor size		1/1.8"				
Pixel size		2.0µm x 2.0	)μm			
Dynamic range		> 80dB				
SNR		≥ 50dB				
Spectral response		380~650n	m			
Exposure		3.9ms~320ms, Auton	natic, Manual			
White balance		Real-time Automat	tic, Manual			
Frame rate		25fps @ 3840	x2160			
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 correspo	onding microscope, or C	Mount		
Resolution		12 MP (4000x3	3000)			
Sensor type		Sony IMX412	CMOS			
Shutter type		Electronic rolling	shutter			
Sensor size		1/2.3"				
Pixel size		1.55µm x 1.5	5µm			
Dynamic range		TBD				
SNR		TBD				
Spectral response		380~650ni	m			
Exposure		Real-time Automat	ic, Manual			
White balance		Real-time Automat	ic, Manual			
Frame rate		25fps @ 3840x2160; 15fp	os @ 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		5.180~5.825	GHz			

 $<sup>\</sup>star$  For C Mount type, the models of camera are JX800 and JX500.











# **4K Smart Camera**

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





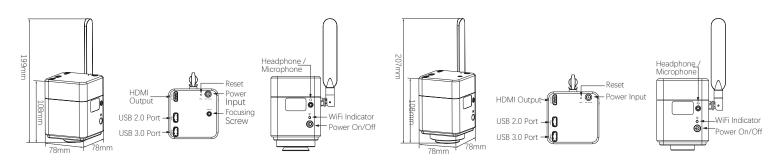
- Work seamlessly with a wide range of computing and mobile devices running most major operating systems, from Windows to iOS, and Android
- Come with imaging APP, automatically display live images after power on
- Embedded 50%/50% light splitting design without damaging original optical system \*
- 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

<sup>\*</sup> Only for dovetail-mount-type models

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 correspo	onding microscope or C N	Mount	
Resolution		8.0 MP (3840x2	2160)		
Sensor type		SONY IMX334	CMOS		
Shutter type		Electronic rolling	shutter		
Sensor size		1/1.8"			
Pixel size		2.0µm x 2.0	μm		
Dynamic range	> 80dB				
SNR		≥ 50dB			
Spectral response		380~650ni	m		
Exposure		3.9ms~320ms, Autom	natic, Manual		
White balance		Real-time Automat	ic, Manual		
Frame rate		25fps @ 3840	x2160		
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 correspo	onding microscope, or C	Mount	
Resolution		12 MP (4000x3	3000)		
Sensor type		Sony IMX412	CMOS		
Shutter type		Electronic rolling	shutter		
Sensor size		1/2.3"			
Pixel size		1.55µm x 1.55	- pμm		
Dynamic range		TBD			
SNR		TBD			
Spectral response		380~650nr	m		
Exposure		Real-time Automat	ic, Manual		
White balance		Real-time Automat	ic, Manual		
Frame rate		25fps @ 3840x2160; 15fp	os @ 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		5.180~5.8250	GHz		

 $<sup>\</sup>ast$  For C Mount type, the models of camera are HW800Z and HW1200Z.





# 5G Wi-Fi Microscope Camera

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





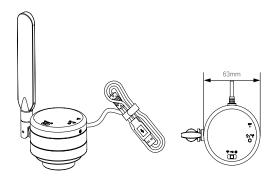
- Unique integrated wireless and USB output for mobile operation
- Reliable operation with iPhones, iPads, Android devices and PC
- Connects up to 10 devices simultaneously
- Free Micro WiFi Lab APP (for Wi-Fi connection)
- Imaging & measuring software Pixit Pro included (for USB connection to PC)
- 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

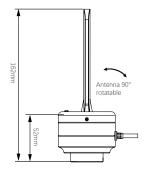
Camera model	MC500W-G1	MC500W-G2	MC4KW-G1	MC4KW-G2		
Resolution	5.0 MP (25	592x1944)	8.0 MP (3840x2160)			
Sensor type	OnSemi	AR0521	SONY IMX	SONY IMX334 CMOS		
Sensor size	1/2	2.5"	1/1	1/1.8"		
Pixel size	2.2µm	x 2.2µm	2.0µm :	2.0µm x 2.0µm		
Dynamic range	74.3dB linear, >	96dB interlaced	72dB (Non-	HDR mode)		
SNR	40	ldB	≥ 5	56dB		
Frame rate		os @ 2592x1944 os @ 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 WiFi IEEE 802.11ac					
Working frequency	5.180~5.825GHz					

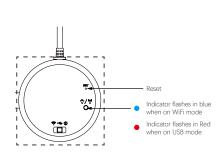
<sup>\*</sup> For dovetail-groove mount type, the models of camera are MC500W-O and MC4KW-O for Olympus microscope; and MC500W-N and MC4KW-N for Nikon microscope.

#### **Dimensions**

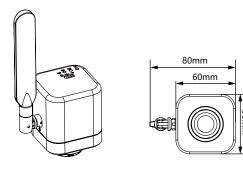
#### MC500W-G1 & MC4K

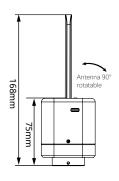


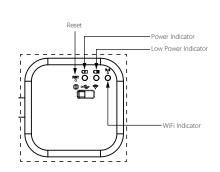




#### MC4K-G2







<sup>\*</sup> MC500W-G2 and MC4KW-G2 are models with built-in battery.



# **USB Microscope Camera**

Excellent microscope camera series for routine microscope imaging and documentation.



- 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

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 × 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	





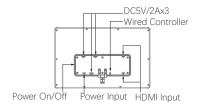
# **HDMI Camera with Display**

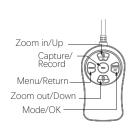
Integrated with ultra-wide dynamic camera and HDMI display, designed to improve operational convenience, suitable for various production inspections.



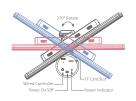
- · Ultra-wide dynamic range and ultra-low-light sensitive
- Equipped with 12.5-inch 1080P high-definition display
- When starting up, it will image instantly and automatically
- Built-in biological / industrial switchable working modes
- Built-in adaptable LED / halogen lamp light source options
- Display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

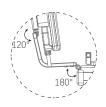
Product model	CE210		
Resolution	2.1 MP (1920x1080)		
Sensor type	SONY CMOS IMX291		
Shutter type	Electronic rolling shutter		
Sensor size	1/2.8"		
Pixel size	2.9µm x 2.9µm		
Dynamic range	128dB		
SNR	30dB		
Spectral response	380~650nm		
Exposure	Real-time Automatic, Single Automatic, Manual R, G, B 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)		













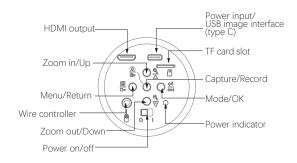
# Dual Output HDMI & USB Camera

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



- 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

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 × 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)		









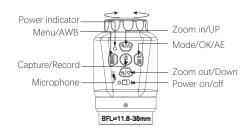
# Dual Output HDMI & USB Camera

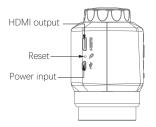
Cost-effective dual output camera with rear focus knob to extend working distance.

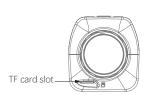


- High performance and price ratio
- · Rear focus mode adapts to mainstream monocular lens to extend working distance
- USB high speed video transmission
- Local storage supports up to 64G, hot-plug TF card
- Pixit Pro software with measurement and image processing tools

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









# Industrial Inspection HDMI & 4K Camera

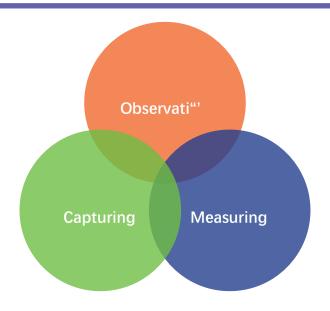
Full HD and 4K UHD cameras specially designed for industrial inspection, 1080P at 60 fps and 4K at 30 fps.



- 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	1920>	<1080		1920x1080			3840x2160 (4K)		
Sensor size	1/	3"	1/2"			1/1.7"			
Pixel size	2.75µm >	< 2,75μm	3.	3.75µm x 3.75µm			1/85μm x 1.85μm		
Frame rate	60	fps		60 fps		30 fps			
Color depth	12:12:1	L2 RGB	12:12:12 RGB		12:12:12 RGB				
Exposure		Automatic, manual							
White balance			Αι	ıtomatic, manı	ual RGB adjustal	ole			
Operation	Navigation button	USB Mouse	Navigation button	USB 1	Mouse	Navigation USB Mouse button			
Fiducial line	8 movable lines with color setting								
Power input		DC 12V, 2A							
Output interface		HDMI				HDMI, oi	nly 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)	65×51×51	67x61x61	65x51x51	67x61x61	67x61x61	65x51x51	93x66x47	93x66x47	



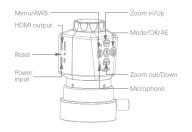
# Low Magnification **HDMI Microscope**

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

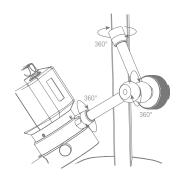


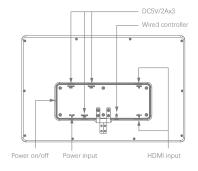
- 12.5-inch 1080P high-definition display
- Built-in multifunctional image processing software
- Back focus mode extends working distance, range 33~320mm
- Ergonomic design, 360° universal pivot bracket, hovering freely
- Comprehensive magnification 4.8~55x (based on measurement on the 12.5" display)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

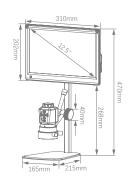
Product model	HD32
Camera resolution	3.5 MP (1920x1080)
Sensor type	Aptina CMOS AR0330
Shutter type	Electronic rolling shutter
Sensor size	1/3"
Pixel size	2.2µm x 2.2µm
Dynamic range	69.5dB
SNR	39dB
Spectral response	380~650nm
Exposure	Real-time Automatic, Single Automatic, Manual
White balance	Real-time 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)













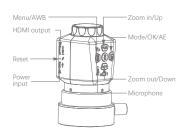
# Continuously Zoom **HDMI Microscope**

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



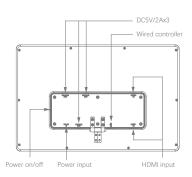
- 12.5-inch 1080P high-definition display
- Built-in multifunctional image processing software
- Back focus mode extends working distance, range 0~232.5mm
- Ergonomic design, 360° universal pivot bracket, hovering freely
- 0.7~5X high definition optical lens, continuous zoom
- Comprehensive magnification 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 ≤ 90° or depression ≤ 24°

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 × 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)		











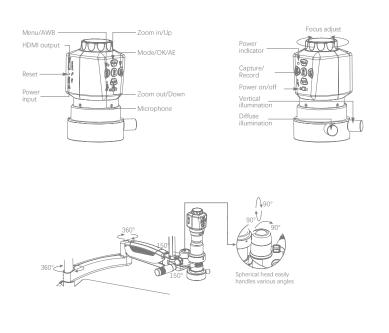
# Large Field of View **HDMI Microscope**

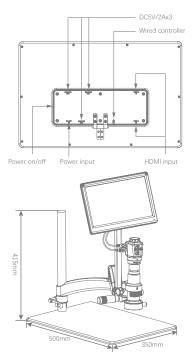
Digital zoom inspection microscope with 3D lighting and dual focus, integrated with articulating arm, provides large field of view.



- 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 ≤ 90° or depression ≤ 24°

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)		







# All-in-one **HDMI Video Microscope**

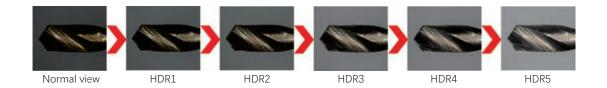
Integrated with ultra-wide dynamic camera and HDMI display, designed to improve operational convenience, suitable for various production inspections.



- 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

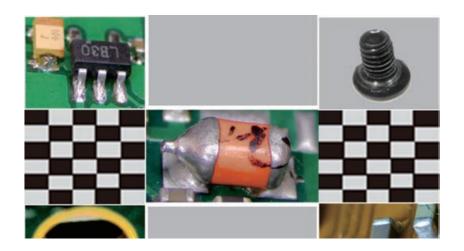
Integrated with ultra-wide dynamic camera and HDMI display, designed to improve operational convenience, suitable for various production inspections.



- 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



2D/3D observing optional



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  $\mu$ 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 µm
- 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

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**

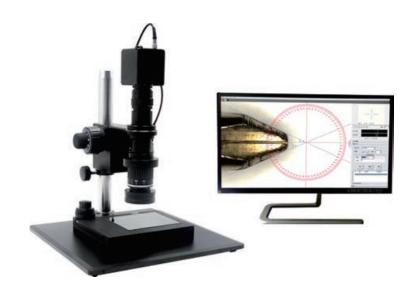
Lens type	Magnification	Numerical aperture	Working distance
Auxiliary objective lens	0.3 X	/	270 mm
Auxiliary objective lens	0.5 X		170 mm
Auxiliary objective lens	0.6 X		130 mm
Auxiliary objective lens	1.5 X		52 mm
Auxiliary objective lens	2 X		39 mm
Long working distance APO objective	2 X	0.06	34.6 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  $\mu$ 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 µm
- 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

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**

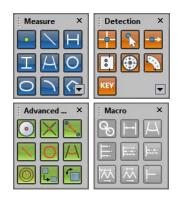
Lens type	Magnification	Numerical aperture	Working distance
Auxiliary objective lens	0.3 X	/	270 mm
Auxiliary objective lens	0.5 X		170 mm
Auxiliary objective lens	0.6 X		130 mm
Auxiliary objective lens	1.5 X		52 mm
Auxiliary objective lens	2 X		39 mm
Long working distance APO objective	2 X	0.06	34.6 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

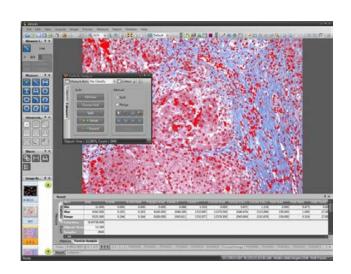


## iWorks I Series

# **Microscopy Software**

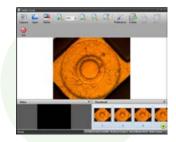
Streamlined microscopy software for imaging and analysis with user-friendly interface. Variety of solutions to image acquisition, measuring, counting, classify, and material analysis module such as particle analysis, cast iron, grain analysis, non-metallic inclusions, phase analysis.





#### **Features & Benefits**

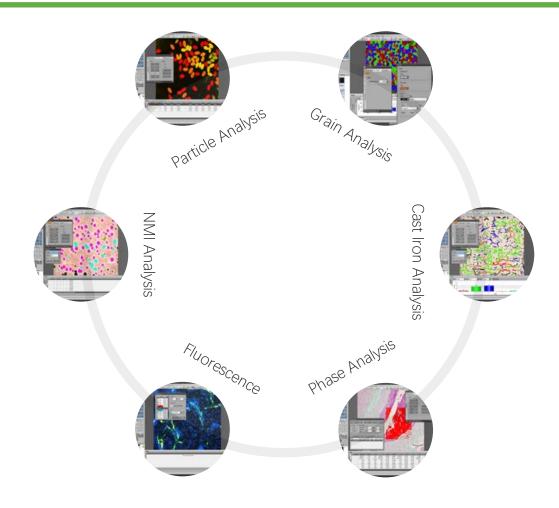
- Very user-friendly interface and modular design
- Image acquisition and measurement with variety of measurement tools
- Image tiling, multi-focus and image enhancement tools
- Strong compatibility for various cameras Interlocking with motorized stages enable precise work
- Measurement images and data 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



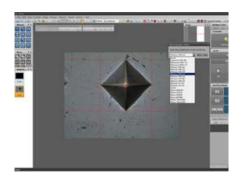
Software package	LITE	FX	FG	FC	Material
Basic measurement	•	•	•	•	•
Advanced measurement	0	0	•	•	•
Annotation	•	•	•	•	•
Manual calibration	•	•			
Auto calibration			•	•	•
Scale marker	•	•	•	•	•
Fixed macro	•	•			
Custom macro			•	•	•
Reflected light		•	•	•	•
3D plot	•	•	•	•	•
Background correction		•	•	•	•
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

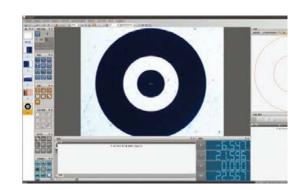
Software package	HL	HS	НХ	HXS
Basic measurement	•	•	•	•
Advanced measurement	0	0	•	•
Annotation	•	•	•	•
Manual calibration	•	•		
Auto calibration			•	•
Scale marker	•	•	•	•
Fixed macro	•	•	•	•
Custom macro			•	•
Auto edge detection		•	•	•
Auto result revision		•	•	•
Remote control		•	•	•
Auto reading			•	•
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.



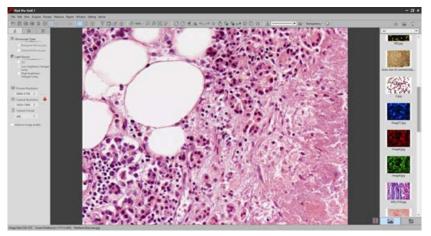
Software package	ммѕ	MMX
Basic measurement	•	•
Advanced measurement	•	•
Annotation	•	•
Auto calibration		
Scale marker	•	•
Custom macro	•	•
Auto edge detection		•
PCS/MCS	•	•
Alignment tools	•	•
Overlay chart	•	•
Excel report	•	•
Drawing window	•	•
Multi-monitor	•	•
Stereoscopic multi-focus		•
Image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



## Pixit Pro

# **Image & Measuring Software**

Standard microscopy imaging and measurement software included with the camera



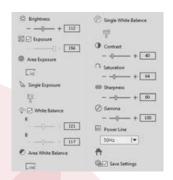
### Working mode setting

- 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

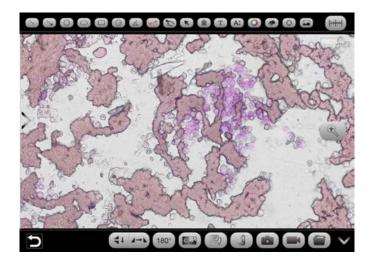




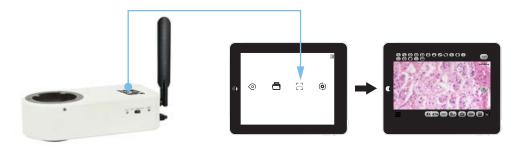
## KoPa WiFi Lab

# **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

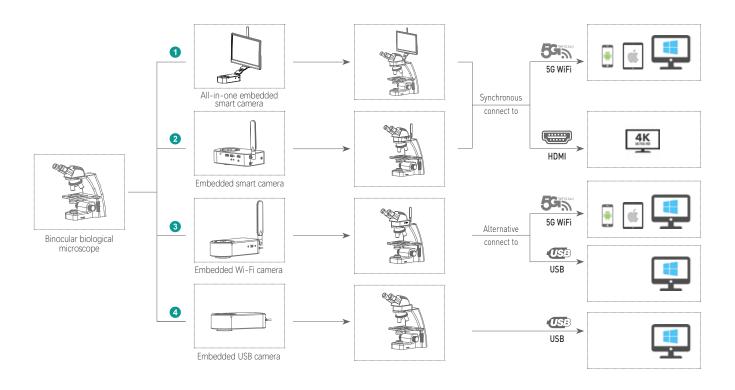


#### **Annotation & measurement tools**

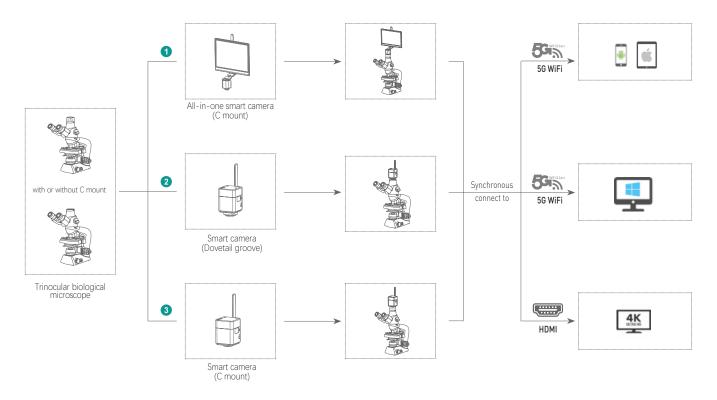


# Camera Solutions to Microscope - 1

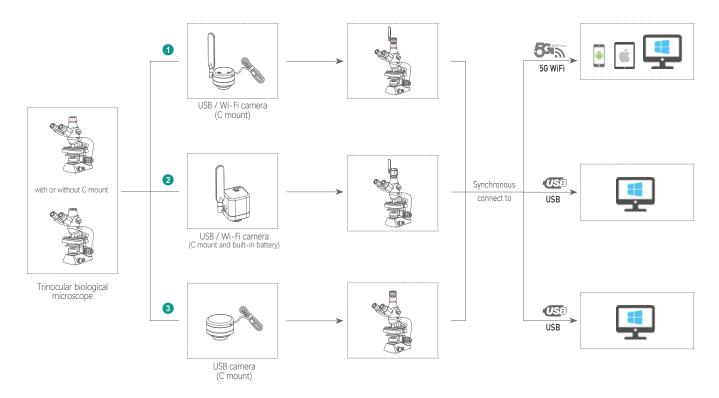
### Solutions for Binocular Biological Microscope



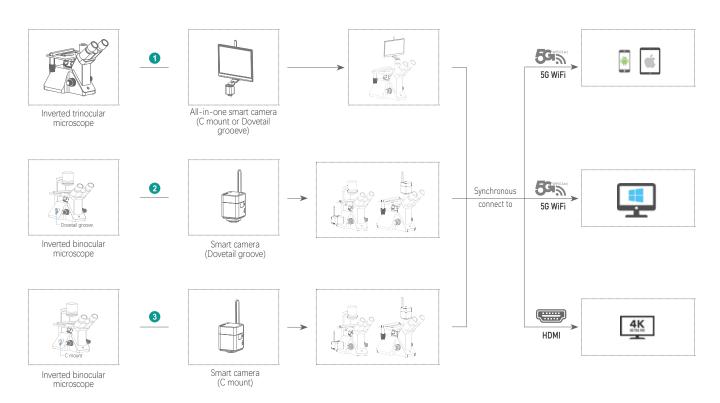
### Solutions for Trinocular Biological Microscope - 1



### Solutions for Trinocular Biological Microscope - 2

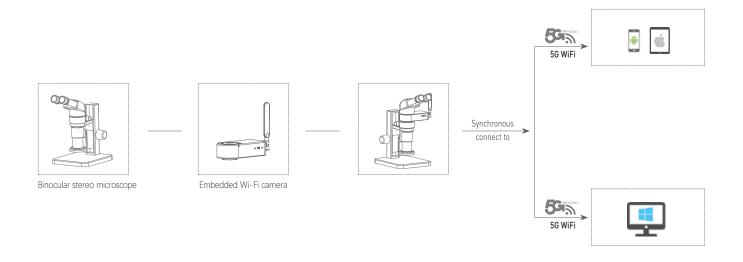


### **Solutions for Inverted Microscope**

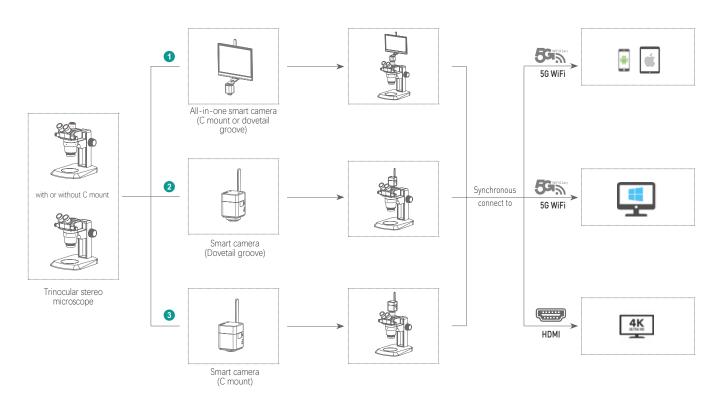


# Camera Solutions to Microscope - 2

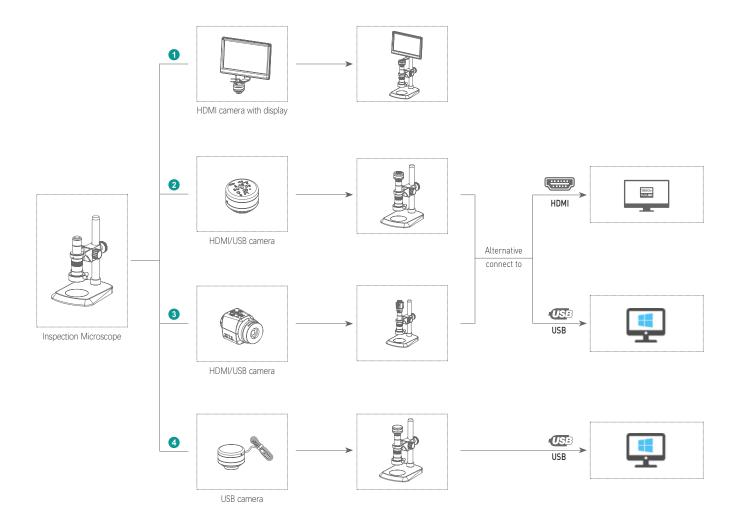
### Solutions for Binocular Stereo Microscope



### **Solutions for Trinocular Stereo Microscope**



## **Solutions for Industrial Inspection**





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