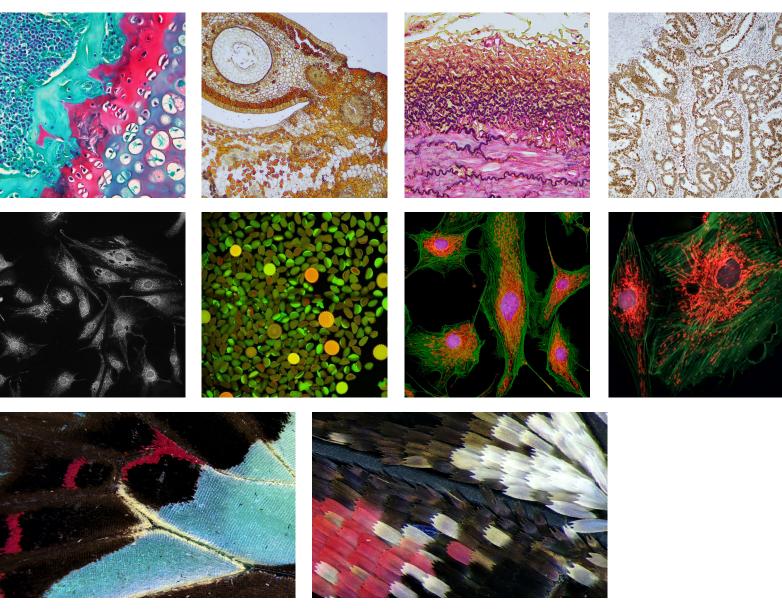




For Leica Biological Microscope

INNOVATED FOR TOP BRAND MICROSCOPES

Create a Stunning Microscope Imaging System for You

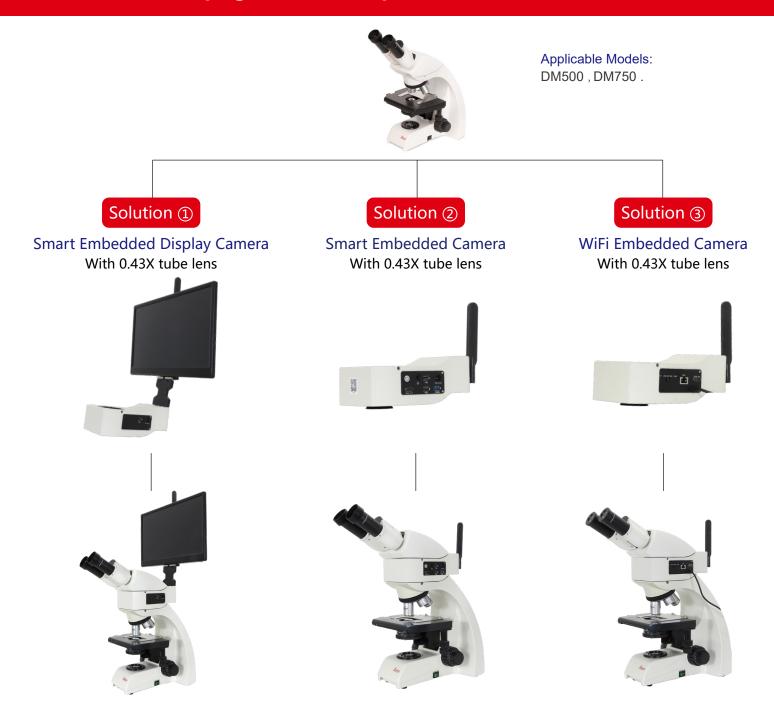








For Binocular Upright Microscopes



Function Comparison

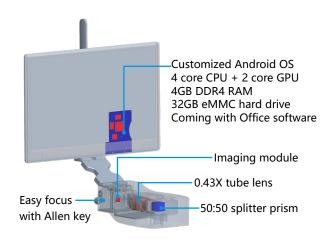
Standard ○ Optional - N/A

	Solution ₁	Solution@	Solution3
Built-in Android OS	•	•	_
Pre-installed Office suits	•	•	-
15.6"high color gamut monitor	•	_	_
Image output methods			
5G WiFi	•	•	•
USB	_	_	•
HDMI or DP	● HDMI	● HDMI	●HDMI
Network	_	_	•

Solution HDMI output method is unavailable for 20.0MP cameras.



Features & Benefits



- Built-in operating system Android processor RK3399, office suit(Word, Excel, Powerpoint) are preinstalled, no need computer.
- Integrated with 15.6" high-definition ISP display.
- Comes with an imaging app that displays live images upon startup.
- Features a 50:50 light-splitting design that preserves the original optical system.
- Professional NPBS beam splitter to ensure true color reproduction.
- Includes a high-power 0.43X tude lens for a wide field of view.
- 32GB built-in eMMC with support for external U-disk storage for pictures and videos.
- USB interface allows for easy connection of keyboards and mouse.

5G WiFi and HDMI are simultaneous outputs



5G WiFi output

Compatible with various devices and operating systems, including Windows, iOS, and Android. Mobile devices can access the system by scanning a QR code. connects to PC via WiFi.





HDMI output

With HDMI output for display on monitors, Tvs and projectors.





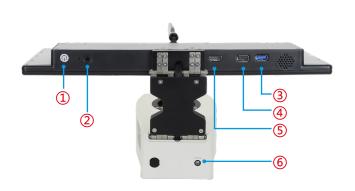


Connecting to the Internet

The camera supports wireless Internet connection (only supports 5G WiFi router signal), by entering the password of any 5G WiFi network, you can directly open the browser to access the Internet.

This will allow you to take advantage of online features and functionalities directly from your camera.







1	Power switch	Switch on/off	
2	Headphone and microphone ports	Connect with headset cable for audio output	
3	USB 3.0 interface	Can be connected to a mouse, keyboard, USB flash drive (for copying videos and images)	
4	USB 2.0 interface		
(5)	HDMI output interface	Transmission via HDMI cable, connected to a display device	
6	Easy focus with allen key	Simple and precise focus adjustment for synchronization between eyepiece and monitor	
Ø	5G WiFi antenna	5G WiFi signal transmission to connect the camera to capture images or control the camera	
8	USB 2.0 interface	Can be connected to mouse, keyboard, U disk	
9	Power input	DC 12V 3A	

Specifications

15.6" high color gamut display

Number of pixels	1920(horizontal) x 1080 (vertical)
Pixels arrangement	RGB vertical stripe
Colour gamut	100% (sRGB)
Display number of colors	16.7M(8Bit)
Surface treatment	Anti-glare
Surface hardness	3H
Viewing angel range	170 horizontal, 170 vertical
Contrast	800
Brightness	500cd/m² (average of 5 points)

Applicable to	Leica	Leica	
Models	TC800	TC800	
Category	ED-L-12	ED-L-20	
Physical resolution	12.0MP	20.0MP	
Image sensor	SONY IMX412 CMOS	SONY IMX147 CMOS	
Exposure mode	Rolling Shutter	Rolling Shutter	
Maximum resolution	4000×3000 (12,000,000Pixels)	5184×3888 (20,155,392 Pixels)	
ISO sensitivity	Equivalent to 100-12800	Equivalent to 100-12800	
Sensor size	1/2.3''	1/2.3''	
Pixel size	1.55µm×1.55µm	1.2μm×1.2μm	
Spectral response	380-650nm	380-650nm	
Exposure capability	Real-time auto and manual adjustment	Real-time auto and manual adjustment	
Exposure time	10µs-333ms	10µs-333ms	
White balance	Real-time auto and manual RB adjustment	Real-time auto and manual RB adjustment	
Preview resolution	4000×3000@30fps,3840×2160@30fps	5184×3888@10fps,3840×2160@15fps	
Power supply	DC 12V 3A	DC 12V 3A	
Wireless protocol	5G WiFi IEEE802.11ac	5G WiFi IEEE802.11ac	
A/D convertsion bit depth	12bit	12bit	
Software and App	Windows Software:KoPa Capture Pro,Embedded software:KoPa WiFi Lab AO,App:KoPa WiFi Lab		

Accessories

Power adapter and power cord (Optional Chinese, American, European, Australian, Korean, British standard etc.)

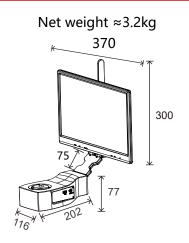




Wired mouse and keyboard

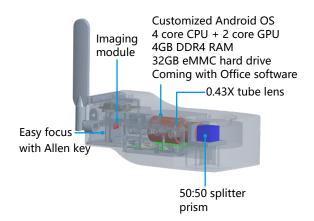


Dimensions(Unit:mm)





Features & Benefits



- Built-in operating system Android processor RK3399, office suit(Word, Excel, Powerpoint) are preinstalled, no need computer.
- Comes with an imaging app that displays live images upon startup.
- Features a 50:50 light-splitting design that preserves the original optical system.
- Professional NPBS beam splitter prism to ensure true color reproduction.
- Includes a high-power 0.43X tube lens for a wide field of view.
- 32GB built-in eMMC with support for external U-disk storage for pictures and videos.
- USB interface allows for easy connection of keyboards and mouse.

5G WiFi and HDMI are simultaneous outputs



5G WiFi output

Compatible with various devices and operating systems, including Windows, iOS, and Android. Mobile devices can access the system by scanning a QR code. connects to PC via WiFi.







HDMI output

With HDMI output for display on monitors, Tvs and projectors.





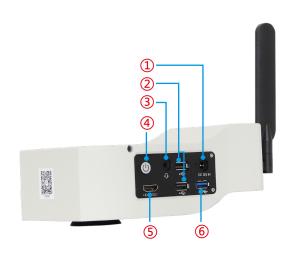


Connecting to the Internet

The camera supports wireless Internet connection (only supports 5G WiFi router signal), by entering the password of any 5G WiFi network, you can directly open the browser to access the Internet.

This will allow you to take advantage of online features and functionalities directly from your camera.







1	Power input	DC 12V 3A.
2	USB2.0 interface	Can be connected to a mouse, keyboard, USB flash drive (for copying videos and images).
3	Headphone and microphone ports	Connect with headset cable for audio output.
4	Power switch	Switch on/off.
(5)	HDMI output interface	Transmission via HDMI cable, connected to a display device.
6	USB3.0 interface	Can be connected to a mouse, keyboard, USB flash drive (for copying videos and images).
7	5G WiFi antenna	5G WiFi signal transmission to connect the camera to capture images or control the camera
8	Easy focus with allen key	Simple and precise focus adjustment for synchronization between eyepiece and monitor.

Specifications

Applicable to	Leica	Leica	
Models	HW800	HW800	
Category	EC-L-12	EC-L-20	
Physical resolution	12.0MP	20.0MP	
Image sensor	SONY IMX412 CMOS	SONY IMX147 CMOS	
Exposure mode	Rolling Shutter	Rolling Shutter	
Maximum resolution	4000×3000 (12,000,000Pixels)	5184×3888 (20,155,392 Pixels)	
ISO sensitivity	Equivalent to 100-12800	Equivalent to 100-12800	
Sensor size	1/2.3"	1/2.3"	
Pixel size	1.55µm×1.55µm	1.2μm×1.2μm	
Spectral response	380-650nm	380-650nm	
Exposure capability	Real-time auto and manual adjustment	Real-time auto and manual adjustment	
Exposure time	10µs-333ms	10μs-333ms	
White balance	Real-time auto and manual RB adjustment	Real-time auto and manual RB adjustment	
Preview resolution	4000×3000@30fps,3840×2160@30fps	5184×3888@10fps,3840×2160@15fps	
Power supply	DC 12V 3A	DC 12V 3A	
Wireless protocol	5G WiFi IEEE802.11ac	5G WiFi IEEE802.11ac	
A/D convertsion bit depth	12bit	12bit	
Software and App	Windows Software:KoPa Capture Pro,Embedded software:KoPa WiFi Lab AO,App:KoPa WiFi Lab		

Accessories

Power adapter and power cord (Optional Chinese, American, European, Australian, Korean, British standard etc.)





HDMI cable



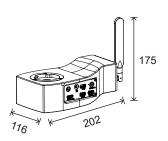
Wired mouse and keyboard

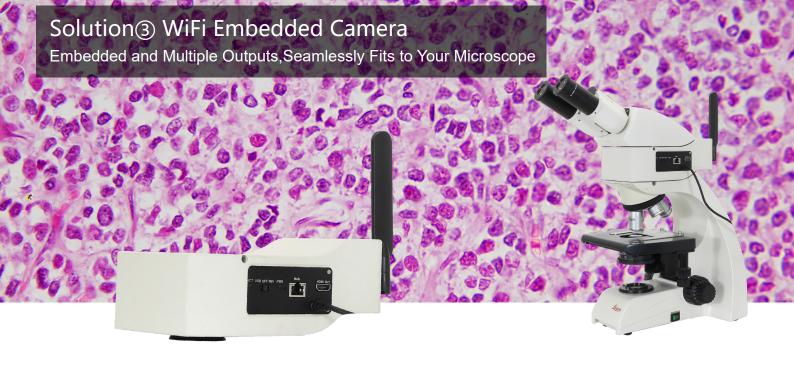




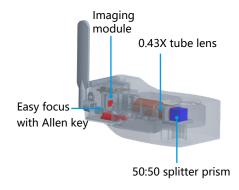
Dimensions(Unit:mm)

Net weight ≈1.9kg





Features & Benefits



- Features a 50:50 light-splitting design that preserves the original optical system.
- Professional NPBS beam splitter to ensure true color reproduction.
- Includes a high-power 0.43X tube lens for a wide field of view.



5G WiFi output

Compatible with various devices and operating systems, including Windows, iOS, and Android. Mobile devices can access the system by scanning a QR code. Allows to connect to PC via WiFi.





HDMI output

Connects to PC via WiFi, with HDMI output for display on monitors, Tvs and projectors.





No software, only live images are available, at which point the camera image properties can be controlled via WiFi or USB.



Supports connection to a computer via USB 2.0. You can utilize the KoPa Capture Pro software or any standard UVC 2.0 protocol software to access the camera's real-time images without the need for driver installation

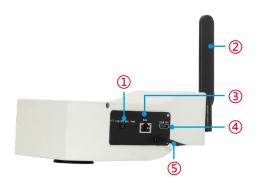




Network output

Connect the camera to the router or switch through the network cable, up to 13 units computers, mobile phones and tablets in the LAN can access and control the images as long as they have installed the software and APP.







1	USB/OFF/Network working mode switching	Two working modes switching
2	5G WiFi antenna	5G WiFi signal transmission to connect the camera to capture images or control the camera
3	Network output interface	When WiFi is in gear: connect to a router or switch to access a LAN so that Windows computers, smartphones, and tablets on the LAN can share the microscopic screen; or connect to the Internet directly.
4	HDMI output interface (only 12.0MP camera)	The display device is connected and the image can be displayed, but the image cannot be controlled.
(5)	USB output/ power supply	Two in one: data transmission and power supply.
6	Easy focus with allen key	Simple and precise focus adjustment for synchronization between eyepiece and monitor.

Specifications

Applicable to	Leica	Leica
Models	FS48	FS48
Category	EB-L-12	EB-L-20
Physical resolution	12.0MP	20.0MP
Image sensor	SONY IMX412 CMOS	SONY IMX147 CMOS
Exposure mode	Rolling Shutter	Rolling Shutter
Maximum resolution	4000×3000 (12,000,000Pixels)	5184×3888 (20,155,392 Pixels)
ISO sensitivity	Equivalent to 100-12800	Equivalent to 100-12800
Sensor size	1/2.3''	1/2.3"
Pixel size	1.55µm×1.55µm	1.2μm×1.2μm
Spectral response	380-650nm	380-650nm
Exposure capability	Real-time auto and manual adjustment	Real-time auto and manual adjustment
Exposure time	10μs-333ms	10μs-333ms
White balance	Real-time auto and manual RB adjustment	Real-time auto and manual RB adjustment
Preview resolution	4000×3000@30fps,3840×2160@30fps	5184×3888@10fps,3840×2160@15fps
Power supply	DC 12V 3A	DC 12V 3A
Wireless protocol	5G WiFi IEEE802.11ac	5G WiFi IEEE802.11ac
A/D convertsion bit depth	12bit	12bit
Software and App	Windows Software:KoPa Capture Pro, App:KoPa WiFi Lab	

Accessories

HDMI cable(optional, 2m only for 12.0MP camera)

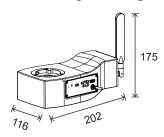


Gigabit ethernet cable (optional, 2m)



Dimensions(Unit:mm)

Net weight ≈1.6kg



Certifications

- 1. Comply with FCC certification of The US Federal Communication Commission.
- 2. Comply with European (standard) safety CE certification.
- 3. Comply with the MIC certification issued by the Ministry of Internal Affairs and Communications of Japan (Electric Wave Method and Electro-Optical Communication Business Law).
- 4. Comply with JATE certification of Japanese telecommunications law directive.
- 5. Comply with the "Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment" (RoHS) Directives in accordance with EU legislation.

	,	3		
Evaluation object	Certification	Certificate File Name & Report	Certificate number & corresponding report number	
	US FCC Report	SZEM180100024801-5G wifi RPT-WF01A FCC Report	SZEM180100024801	
		SZEM180100024802-RT-WF01A FCC Report	SZEM180100024802	
		Appendix A-Photographs of EUT Constructional Details		
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		for SZEM1801000248CR-FCC	SZEM1801000248CR	
WF01A(5G WiFi 11ac)module	US FCC ID Certification	2AFO3WF01A_NII-WF01A FCC ID	2AFO3WF01A	
Certification	EU CE report	SZEM180100024901 EN301489 RPT-WF01A CE Report	SZEM180100024901	
		SZEM180100024902 WIFI5G RPT-WF01A CE Report	SZEM180100024902	
	Japanese MIC Certification	CSRT180084-WF01A Japanese MIC Certification	CSRT180084	
	Japanese JATE Certification	CSTT180018-WF01A Japanese JATE Certification	CSTT180018	

Patented

Patent category	Patent name	Patent number
	Electronic eyepiece	ZL 2015 3 0193227.8
	Wireless electronic eyepiece	ZL 2015 3 0193223.X
Design patent	Electronic eyepiece with spectroscopic system	ZL 2019 3 0331144.9
	Microscope (with splitting prism camera)	ZL 2019 3 0717439.X
	Microscope with camera	ZL 2019 3 0717442.1
	WiFi microscope eyepiece	ZL 2015 2 0296469.4
	Electronic eyepiece	ZL 2015 2 0426409.X
Utility model patents	Wireless electronic eyepiece	ZL 2015 2 0426313.3
	Microscope with displayer	ZL 2019 2 0928962.1
	Electronic eyepiece with splitting prism system	ZL 2019 2 1022863.3

Software copyright

Category	Name of software	Platform	License number
	KoPa Capture Pro	Windows	2021SR1287730
Computer software copyright registration certificate	KoPa WiFi Lab AO	Android	2021SR1304520
	KoPa WiFi Lab	Android	2019SR0117768
Continuate		iOS	2019SR0028558
	KoPa View	Linux	2024SR1617066

KoPa GuangZhou Ostec Electronic Technology Co.,Limited

Manufacturer: No.8 West Lane, Jiangcheng Road, Bangjiang East Village, Dalong street, Panyu District, Guangzhou, China.





ISO9001 Verification No:00223Q26818R3S

The content of this leaflet has been reviewed by our company at the time of its release. Due to technological development, the actual product is subject to change without notice.

V1.2 2025.05