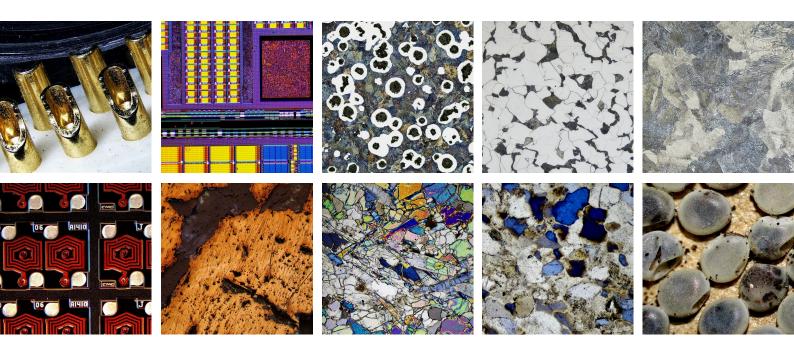


# Microscope Camera Solutions For Nikon Industrial Microscope

### INNOVATED FOR TOP BRAND MICROSCOPES

Create a Stunning Microscope Imaging System for You



### For Trinocular Microscopes









Applicable Models: ECLIPSE LV100N POL , Ci-POL, L300ND , L300N , L200ND, L200N, SMZ745T, MA200.



Measuring Camera



Option B





Option D
Smart Display Camera







Standard ○ Optional - N/A

	Option A	Option B	Option C	Option D
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	● DP	● DP
Network	•	•	_	_

#### Option A, B

- HDMI output comes with embedded software: KoPa View;
- Max 60 fps for 3840x2160 (4Kx2K) real-time preview, support snapshot and record video;
- Exclusive image modes for biological, industrial, fluorescence microscope to have accurate color reproduction;
- Option A: USB+HDMI or Network+HDMI output;
   Option B: USB+HDMI or WiFi+HDMI+Network output;
- Support depth of field fusion, stitching function (Windows software -KoPa Capture Pro);
- Support saving photos and videos to USB disk by using mouse and keyboard.

### Option C, D

- Comes with a deeply customised Android operating system, with mobile version of office suit that including Word, Excel and PPT;
- Max 30 fps for 3840x2160 (4Kx2K) real-time preview, support snapshot and record video;
- Exclusive image modes for biological, industrial, fluorescence microscope to have accurate color reproduction;
- With depth of field fusion, manual focus, stitching, measurement and other functions;
- Option C: WiF+DP output;
   Option B: local on-screen display or WiFi+DP output;
- Support saving photos and videos to USB-disk by using mouse and keyboard.

### For Inverted Microscopes



Applicable Model: ECLIPSE MA100N.

Solution ①

WiFi Camera With 0.43X tube lens



Solution ②

Smart display camera With 0.43X tube lens



### **Function Comparison**

● Standard ○ Optional − N/A

	Solution <sub>①</sub>	Solution②
Built-in Android OS	-	•
Pre-installed Office suits	-	•
15.6"high color gamut monitor	-	•
Image output methods		
5G WiFi	•	•
USB	•	_
HDMI or DP	● HDMI	● DP
Network	•	-

### For Binocular Stereo Microscopes



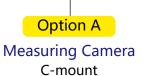
Applicable Models: SMZ800N,SMZ745,SMZ1270.

Embedded beam splitter

With 0.43X tube lens



Can be matched with the following models





Option B
WiFi Camera
C-mount



### Option C

Smart Camera C-mount



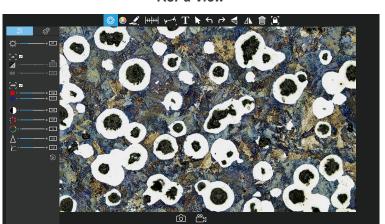
### **Function Comparison**

● Standard ○ Optional − N/A

	Option A	Option B	Option C
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	● DP
Network	•	•	-

KoPa View

>>> HDMI output comes with measurement tools (built-in OSD menu -KoPa View); Support saving photos and videos to USB-disk by using mouse and keyboard.



Main Functions of KoPa View					
₹ <u>Ö</u> }	Settings	Т	Text		Mirror
	Color settings	×	Select object	Û	Delete
L	Annotation tools	$\leftarrow$	Cancel		Freeze image
	Calibration	$\rightarrow$	Redo	6	Snapshot
H-H	Measuring tools		Flip	<u> </u>	Record video
	Camera property control				
÷Ģ	Target brightness	[AWB]	White Balance	Δ	Acuity
[AE]	Automatic exposure	0	Contrast		Gamma
+	Exposure time	: 8	Saturation	(*)	Restore default
ISO	Gain		Chroma		

#### 15 measuring tools

















Linear distance measurement measurement measurement



Rectangular

angle measurement



Concentric circle measurement





measurement measurement

Three-point vertical line measurement



Four-point angle measurement



Ellipse measurement



Concentric radius circle center distance drawing circle

measurement





Crosses

#### Annotation tools











Straight line Arrow

Rectangle

### Dedicated image mode

Depending on the application of the microscope, the corresponding exclusive image mode can reproduce the image effect more accurately:

- 1. Biological microscope
- 2. Industrial microscope
- 3. Fluorescence microscope



#### Industrial microscope



Carbon Steel (objective: 50X)



Grey Cast iron (objective: 50X)



Hypo eutectoid steel (objective: 50X)

### Multiple image output modes

Option A: HDMI, USB, USB+HDMI, Network+HDMI Output; Option B: HDMI, USB, WiFi, USB+HDMI, WiFi+HDMI+Network Output (USB and WiFi cannot output at the same time).





HDMI output

Connect the camera to a monitor or large TV via HDMI cable with OSD "KoPa View".





#### **Network output**

Connect the computer via network cable by using software" KoPa Capture Pro".





Connect the computer via USB /network cable by using software" KoPa Capture Pro".





#### **5G WiFi output(only option B)**

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

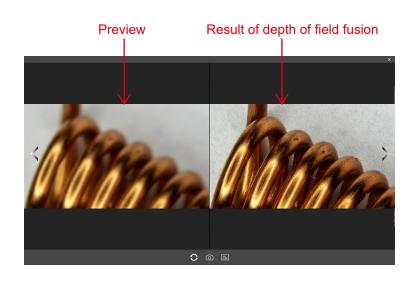
Connects to a computer via a network cable, suitable for wired long distance image transmission.



### Depth of Field Fusion

This is achieved through Windows software: KoPa Capture Pro.

Breaking through the limitation of insufficient depth of field under high-magnification objective lens, you can obtain greater depth of field by adjusting the focal length, thus obtaining sharper images than real-time single-frame images, and supporting two saves in one shot.



## Specifications

	Option A	Option B
Models	MC2000	CF48
C-mount category	AJ-C-08	BJ-C-08
With 0.43X tube lens category	AJ-N-08	BJ-N-08
Physical resolution	3	8.3MP
Image sensor	SONY IN	MX678 CMOS
Sensor size	1	1/1.8''
Pixel size	2μι	m×2µm
A/D convertsion bit depth		12bit
Exposure time	10	lus~10s
Exposure mode	Rolling shutter	
ISO sensitivity	Equivalent to 100-12800	
Spectral response	400-650nm	
Exposure capability	Real-time automatic and manual adjustment	
White balance	Real-time automatic and manual RB adjustment	
Power supply	DC 5V 2A	
Video recordings	3840×2160@60fps	
video recordings	1920×1080@60fps	
HDMI output	3840×2	2160@60fps
HDIMI Output	1920×1080@60fps	
LICE output	3840×2160@60fps	
USB output	1920×1080@60fps	
Notwork output	3840×2160@60fps	
Network output	1920×1080@60fps	
Software and App	Windows Software: KoPa Capture Pro, OSD: KoPa View, APP: KoPa WiFi Lab	

### Accessories

HDMI cable

USB mouse

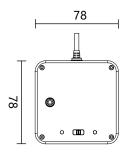




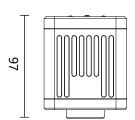
### Dimensions(Unit:mm)

#### Option A

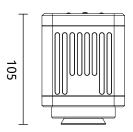
Net weight ≈0.8kg



Camera with C-mount

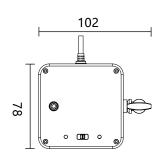


Camera with 0.43X tube lens

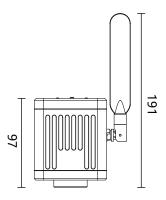


Option B

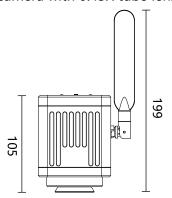
Net weight ≈1kg



Camera with C-mount



Camera with 0.43X tube lens



Built-in software: KoPa WiFi Lab AO

Comes with a deeply customised Android operating system, with mobile version of office suit that including Word, Excel and PPT; support saving photos and videos to USB-disk by using mouse and keyboard.



#### 18 measuring tools



Linear distance measurement



Parallel line spacing

measurement



Three-point measurement



Three-point drawing circle measurement



Manual count



Circular measurement



Center distance measurement of double parallel lines



Four-point angle measurement



Concentric circle measurement

Crosses

Built-in 32GB hard drive for direct saving of images and videos. Saved images can be copied via WiFi or USB-drive.



Three-point angle

measurement

Arc measurement

Circle radius

measurement

Ring

measurement

Rectangular

measurement

Polyline

measurement

Ellipse

measurement

 $\overline{\oplus}$ 

circle center

distance drawing circle measurement







Snapshot Screen capture Record

Screen record



File management

Supports the installation of third-party office software, which can directly generate reports containing pictures and measurement results.







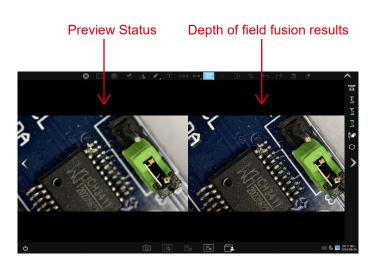




### Depth of field fusion

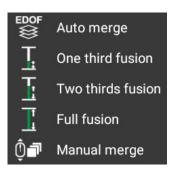
Our innovative camera leverages unique optoelectronic mechanisms and advanced image algorithms to efficiently capture images at various focal planes. This technology enables the timely synthesis of images with optimal focus, ensuring clarity and precision in every shot.

- Suitable for almost all types of microscopes on the market.
- Depth of field range, with a specific microscope, the depth of field fusion can reach max 64mm (object height).
- Fast fusion speeds and precise thresholds greatly enhance the user experience.
- During the depth fusion scanning process, the motor operates quietly and without any vibrations. The durability of the optoelectronic mechanism exceeds 3 million cycles, with each complete scan counting as one cycle.



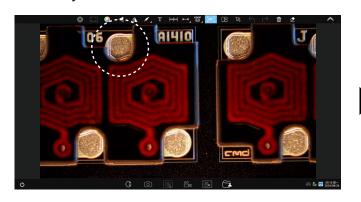
Depth of field fusion travelling can be selected from auto- fusion, 1/3 travelling fusion, 2/3 travelling fusion, full fusion and manual fusion.

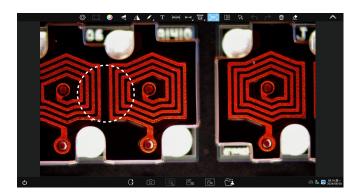
- Auto-fusion is the camera automatically scans, determines the highest and lowest points on the object side, and fuses every clear point of the fallout.
- 1/3 travelling fusion is a forced scan fusion of one third of the camera's physical maximum scan stroke.
- 2/3 traveling fusion is a forced scanning fusion of two thirds of the camera's physical maximum scanning stroke.
- Full fusion is a forced scanning fusion for the physical maximum scanning stroke of the camera.
- Manual fusion is a scanning fusion of the region of interest by controlling the scanning stroke with the mouse wheel.



#### Manual focus

Manually roll the mouse wheel and click on the area you want to observe to focus on it.

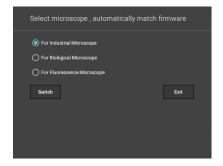




### >>> Dedicated image mode

Depending on the application of the microscope, the corresponding exclusive image mode can reproduce the image effect more accurately:

- 1. Biological microscope
- 2. Industrial microscope
- 3. Fluorescence microscope



#### Industrial microscope



Carbon Steel (objective: 50X)



Grey Cast iron (objective: 50X)



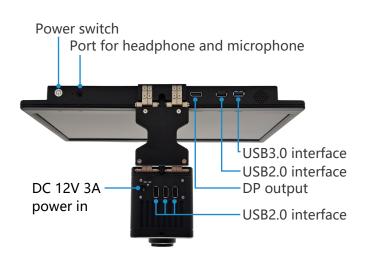
Hypo eutectoid steel (objective: 50X)

#### Multiple image output modes

Option C: DP, WiFi, WiFi+DP output;

Option D: local on-screen display, DP, WiFi, WiFi+DP output.







#### **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.







#### **DP** output

With DP 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.



### 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)

	Option C	Option D
Models	TE2000	JX200
C-mount category	CJ-C-08	DJ-C-08
With 0.43X tube lens category	CJ-N-08	DJ-N-08
Physical resolution	8.3	MP
Image sensor	SONY IMX	678 CMOS
Sensor size	1/1	1.8"
Pixel size	2μm:	×2µm
A/D convertsion bit depth	12	bit
Exposure time	10us	~10s
Exposure mode	Rolling	shutter
ISO sensitivity	Equivalent to 100-12800	
Spectral response	400-650nm	
Exposure capability	Real-time automatic and manual adjustment	
White balance	Real-time automatic and manual RB adjustment	
Power supply	DC 12V 3A	
Video recordings	3840×2160@30fps	
video recordings	1920×108	30@30fps
HDMI output	3840×2160@30fps	
ποινιι σατρατ	1920×1080@30fps	
USB output	3840×2160@30fps	
OSE Output	1920×1080@30fps	
Network output	3840×2160@30fps	
	1920×1080@30fps	
Software and App	Windows Software:KoPa Capture Pro,Embedded software:KoPa WiFi Lab AO,App:KoPa WiFi Lab	

### Accessories

DP cable (option C)

The second second

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



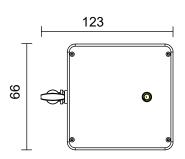
USB mouse and keyboard



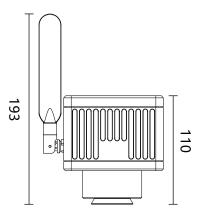
### Dimensions(Unit:mm)

#### Option C

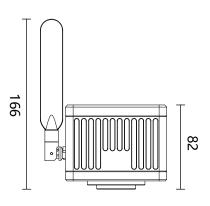
Net weight ≈1.3kg



Camera with 0.43X tube lens

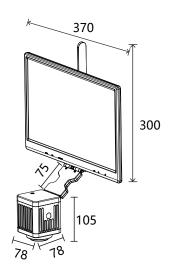


Camera with C-mount

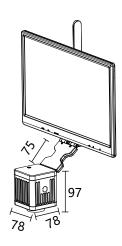


Option D

Net weight ≈2kg Camera with 0.43X tube lens

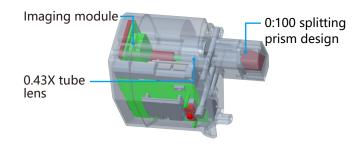


Camera with C-mount





#### Features & Benefits



- Features a 0:100 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.





#### **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	5G WiFi antenna	5G WiFi signal transmission to connect the camera to capture images or control the camera
2	USB output/ power supply	Two in one: data transmission and power supply.
3	Easy focus with allen key	Simple and precise focus adjustment for synchronization between eyepiece and monitor.
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.
<b>⑤</b>	Network output interface	Connect the camera to the router or switch through the network cable.
6	USB/OFF/WiFi working mode switching	Two working modes switching: USB and WiFi.

### Specifications

Name	WiFi Camera
Models	DF12
Category	GB-NS-08
Physical resolution	8.3MP
Image sensor	SONY IMX678 CMOS
Exposure mode	Rolling Shutter
Maximum resolution	3840×2160 (8,294,400Pixels)
ISO sensitivity	Equivalent to 100-12800
Sensor size	1/1.8"
Pixel size	2μm×2μm
Spectral response	400-650nm
Exposure capability	Real-time auto and manual adjustment
Exposure time	10μs-10s
White balance	Real-time auto and manual RB adjustment
Preview resolution	3840×2160@60fps
Power supply	DC 5V 3A
Wireless protocol	5G WiFi IEEE802.11ac
A/D convertsion bit depth	12bit
Tube lens	0.43X
Software and App	Windows Software:KoPa Capture Pro, App:KoPa WiFi Lab

### Accessories

HDMI cable (optional)

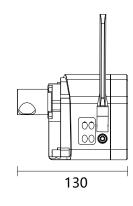


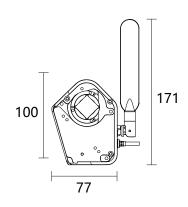
Gigabit Ethernet cable(optional)



### Dimensions(Unit:mm)

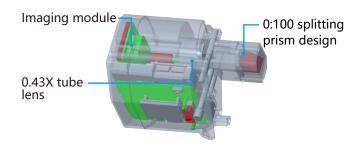
Net weight ≈1.1kg



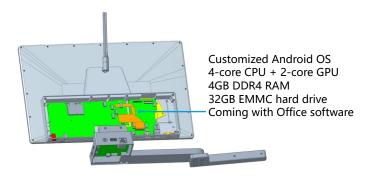




#### Features & Benefits



- Features a 0:100 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.



- 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.
- 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.



#### **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.





#### **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.





#### **DP** output

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









1	Easy focus with allen key	Simple and precise focus adjustment for synchronization between eyepiece and monitor
2	Network output interface	Connected to the screen via a network cable, the image is captured via software
3	5G WiFi antenna	5G WiFi signal transmission to connect the camera to capture images or control the camera
4	Network output interface	Connected to the screen via a network cable, the image is captured via software
(5)	USB 2.0 interface	Can power the camera (output voltage 5V, maximum output current 2A)
6	Power Input	DC 12V 3A
7	USB 3.0 interface	Can be connected to a mouse, keyboard, USB flash drive (for copying videos
8	USB 2.0 interface	and images)
9	DP output interface	Through the DP cable, connect with the display device and transmit

100	USB 2.0 interface	Can be connected to a mouse, keyboard, USB flash drive (for copying videos and images)
111	Headphone and microphone ports	Connect with headset cable for audio output
12	Power switch	Switch on/off

# 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)

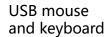
Name	Smart Display Camera		
Models	YY48		
Category	SD-NS-08		
Physical resolution	8.3MP		
Image sensor	SONY IMX678 CMOS		
Exposure mode	Rolling Shutter		
Maximum resolution	3840×2160 (8,294,400Pixels)		
ISO sensitivity	Equivalent to 100-12800		
Sensor size	1/1.8"		
Pixel size	2μm×2μm		
Spectral response	400-650nm		
Exposure capability	Real-time auto and manual adjustment		
Exposure time	10μs-10s		
White balance	Real-time auto and manual RB adjustment		
Preview resolution	3840×2160@30fps		
Power supply	DC 12V 3A		
Wireless protocol	5G WiFi IEEE802.11ac		
A/D convertsion bit depth	12bit		
Tube lens	0.43X		
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.)







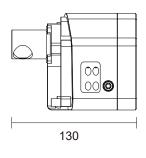


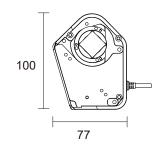
# Gigabit Ethernet cable

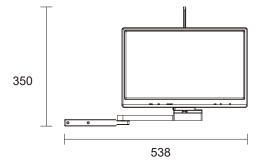


### Dimensions(Unit:mm)

### Net weight ≈2.6kg











### **Features**

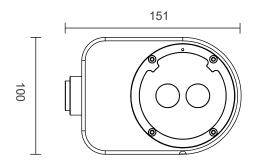


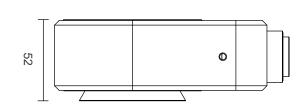
- Features a 50:50 light-splitting design that preserves the original optical system.
- Professional NPBS beam splitter prism to ensure true color reproduction.
- Includes a high-power 0.43X tube lens for a wide field of view.

### Model

Applicable to	Nikon
Model	PA043NT

### Dimensions(Unit:mm)





#### 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.

Evaluation object	Certification	Certificate File Name & Report	Certificate number & corresponding report number	
WF01A(5G WiFi 11ac)module Certification		SZEM180100024801-5G wifi RPT-WF01A FCC Report	SZEM180100024801	
	US FCC Report	SZEM180100024802-RT-WF01A FCC Report	SZEM180100024802	
		Appendix A-Photographs of EUT Constructional Details		
		for SZEM1801000248CR-FCC	SZEM1801000248CR	
	US FCC ID Certification	2AFO3WF01A_NII-WF01A FCC ID	2AFO3WF01A	
	EU CE report	SZEM180100024901 EN301489 RPT-WF01A CE Report	SZEM180100024901	
	LO GE Teport	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
Design patent	Electronic eyepiece	ZL 2015 3 0193227.8
	Wireless electronic eyepiece	ZL 2015 3 0193223.X
	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
Utility model patents	WiFi microscope eyepiece	ZL 2015 2 0296469.4
	Electronic eyepiece	ZL 2015 2 0426409.X
	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
Computer software copyright registration certificate	KoPa Capture Pro	Windows	2021SR1287730
	KoPa WiFi Lab AO	Android	2021SR1304520
	KoPa WiFi Lab	Android	2019SR0117768
		iOS	2019SR0028558
	KoPa View	Linux	2024SR1617066



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.

The names of other companies, product names, and trademarks OLYMPUS Nikon Leica Telephone W 1 to recorded on this leaflet are owned by their companies

V1.2 2025.05