



MEASUREMENT SOLUTION PROVIDER



CATALOGUE NO. DM-E01

**DIGITAL  
MICROSCOPES**

## Focus on the development of video microscopes Solutions for every customer scenario

Compared to traditional optical microscopes, video microscopes feature digital display to reduce eye strain, and support image storage for convenient analysis. Equipped with measurement and annotation functions, certain models also include autofocus, 3D imaging, and measurement, delivering a feature-rich and comfortable experience.



01

### Large Depth Microscopes

Capable of both high-magnification 2D analysis and 3D stereoscopic rotation, this solution is ideal for observing and measuring microscopic topography.



04

### 3D Rotating Microscopes

The 3D Rotating Microscope supports 360° rotation of samples or orbital rotation of objective lenses. Breaking the limitation of a single viewing angle, it fully presents the three-dimensional structure of samples, and can clearly display the internal or side structures, assembly gaps, or complex curved surfaces of samples, making up for the viewing angle limitations of conventional microscopes.



02

### Measuring Microscopes

Focused on microscopic observation and high-accuracy measurement, it offers efficient automatic edge detection. Users can select optional motorized zoom, bottom lighting, and specialized functions like focus stacking.



05

### Portable Mini Microscopes

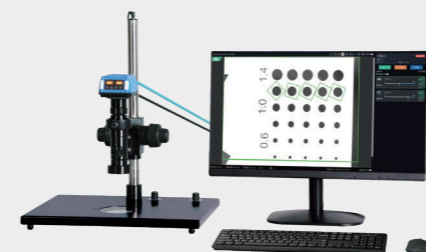
Compact in size and light in weight, it is easy to hold or carry around. It features simple operation with no need for complicated debugging. Some models support wireless connection to mobile phones or computers, enabling real-time image transmission and data storage.



03

### Auto Focus Microscopes

Standard automatic focusing saves operation time and ensures high precision, minimizing manual errors. It can be integrated with automation platforms to support continuous observation or batch inspection. The system also allows for seamless switching between high and low magnification objectives, quickly locking onto sharp images at various zoom levels.



06

### Smart Microscopes

Visual inspection is equipped with a variety of inspection tools that can be combined arbitrarily. It features automatic position and orientation correction, eliminating the need for precise workpiece positioning. The system supports multiple industrial communication protocols (TCP/IP, ModBusTCP, ModBusRTU, Profinet, Ethernet/IP, MELSEC/SLMP, Serial).

01

## LARGE DEPTH MICROSCOPES

Capable of both high-magnification 2D analysis and 3D stereoscopic rotation, this solution is ideal for observing and measuring microscopic topography.






2D Measurement

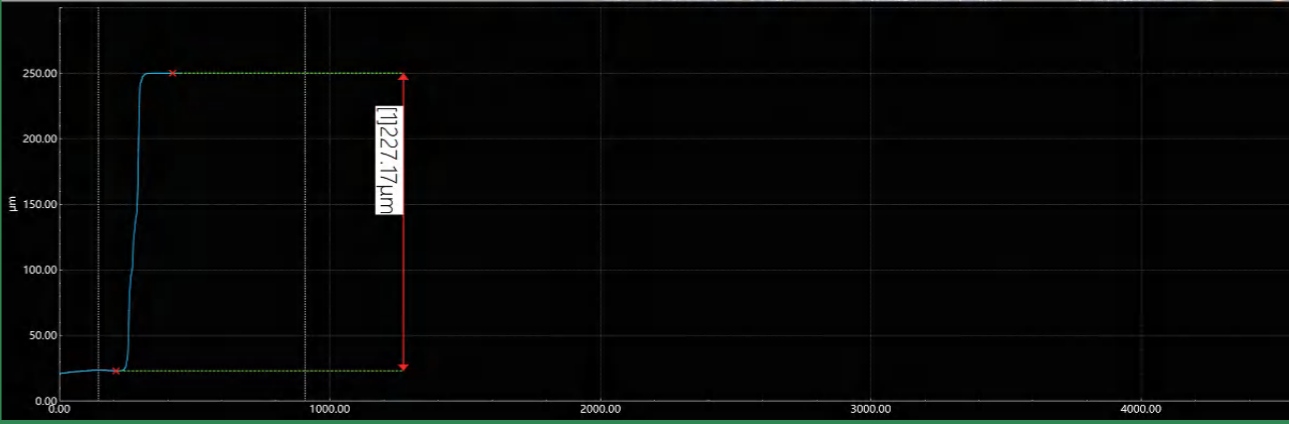
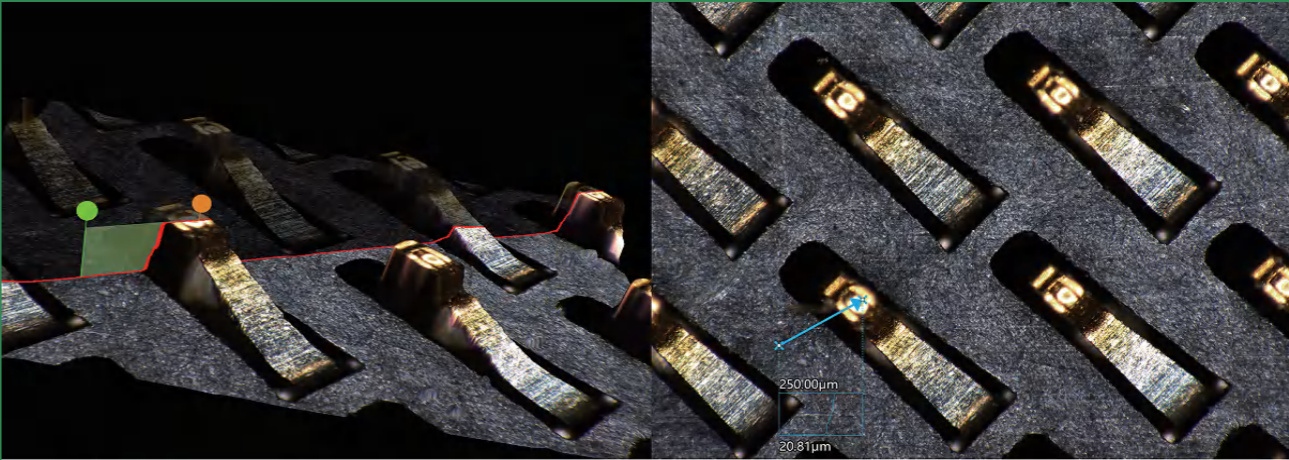
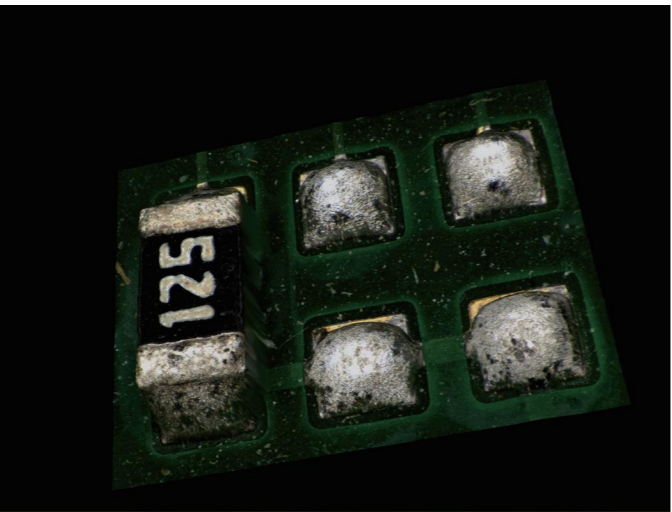
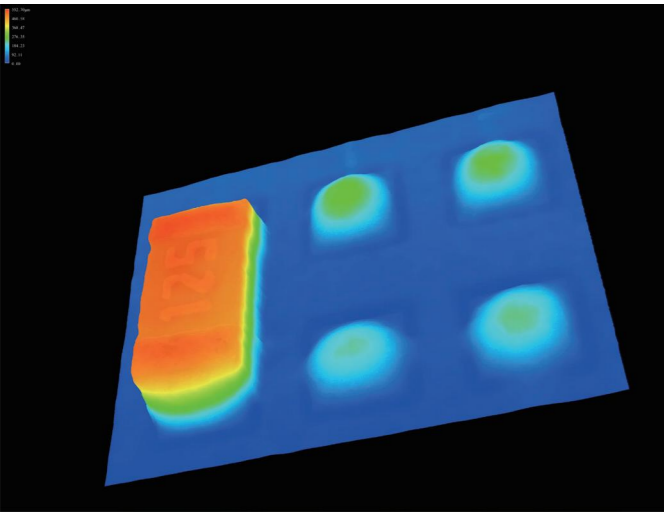
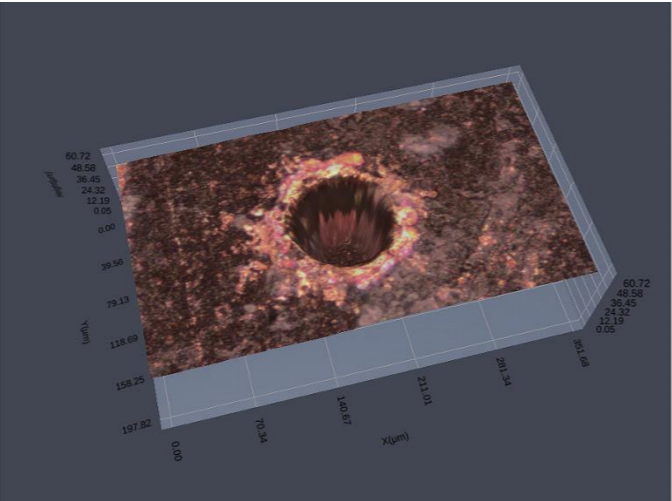


3D Measurement

Microscope Function Selection Chart

Code	3D measurement	Auto-Focus	Motorized Zoom	Image Stitching	Coaxial Light	Achromatic Objective
 ISM-H5000	✓	✓	✓	✓	✓	✓
 5324	✓	✓				
 5323	✓				✓	✓

Application Scenarios



## LARGE DEPTH OF FIELD 3D MEASURING MICROSCOPE (ADVANCED TYPE) CODE ISM-H5000

2D/3D MEASUREMENT

MOTORIZED XYZ AXIS

MAGNIFICATION 30~6000X

MOTORIZED ZOOM LENS

STEREOSCOPIC 3D IMAGING

MAP NAVIGATION

IMAGE STITCHING

- High definition telecentric imaging lens
- Auto focus
- 4 motorized switching objectives
- Split-screen display
- Rotatable stage
- Take picture and video
- Multiple illumination options for different products and scenarios
- Elimination of reflections and dark field halos, HDR, optical shadows
- Automatic stitching for large field view and measurement after stitching
- Measurements can be saved in reports and exported



side camera shows the relationship between the lens and the workpiece, reducing the risk of collision



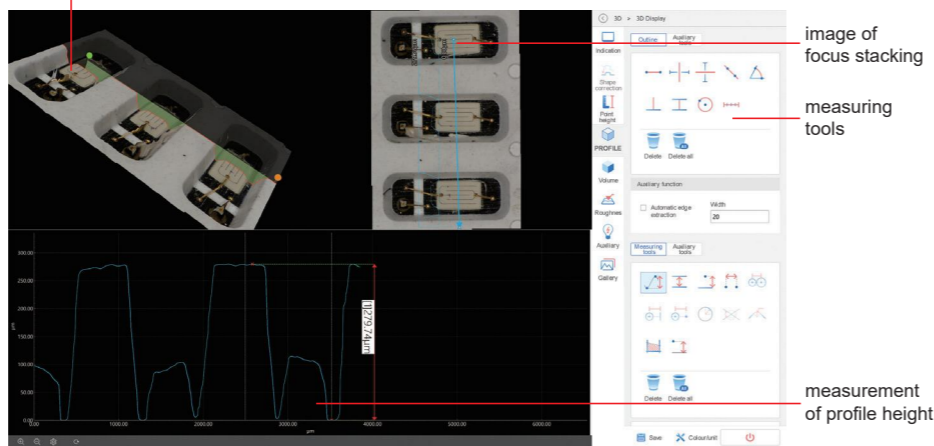
controller



tiltable observation

### COMPUTER SOFTWARE (INCLUDED)

3D image of focus stacking



To be continued

Continued from previous page

### SOFTWARE FUNCTION

Imaging	2D imaging, 3D imaging
	adjustable elimination of reflection
	adjustable elimination of ring halos
	HDR, adjustable brightness/contrast/color difference
	optical shadow
	jitter correction
	2D stitching, 3D stitching
Measuring	fast 3D synthesis, high precision 3D synthesis
	chromatogram height
	stitching measurement
File	plane measurement (distance/angle/radius/area, automatic edge detection, scale display)
	3D measurement (point height/profile etc.)
	take and save pictures, videos
	export report to Excel

### SPECIFICATION

Magnification		30X~6000X
		(30X、40X、50X、80X、100X、150X、200X、300X、300X、400X、500X、700X、1000X、1500X、2000X、2500X、4000X、5000X、6000X) 5000X and 6000X are digital magnification
Objective		1.5X, 5X, 20X, 50X
Horizontal resolution		0.42μm
Maximum depth of field		30mm
Working distance		2~30mm
Max. height of workpieces		90mm
View field		50.60×38.00μm~9977.30×7483.00μm
Accuracy		±(0.5+0.005L)μm (L is measuring length or height in μm)
Illumination		bright field (full/zoned), dark field (full/zoned), hybrid lighting, projected lighting
Light source life		LED, life span about 40,000 hours
Maximum viewable pixel size		2D: 5 billion pixels, 3D: 2.5 billion pixels
Tilting angle range		-89°~+89°
Camera	sensor	1/1.7"CMOS
	pixel	12.22M (4168×3062)
	frame rate	30fps
	resolution	quick: 2048×1536, standard: 2880×2160, high resolution: 4000×3000, high definition: 8000×6000/12000×9000
Motorized stage	range	40mm×40mm
	size	228mm×204mm
	max. weight of workpiece	5kg
Upper Z-axis	range	50mm
Lower Z-axis	range	50mm
Power supply		220V
Dimension (L×W×H)		600×320×710mm
Net weight		70kg

## LARGE DEPTH OF FIELD 3D MEASURING MICROSCOPES

AUTO  
FOCUS

PLANE MEASUREMENT AND  
PROFILE HEIGHT MEASUREMENT

ROTATABLE  
WORKTABLE

ROTATABLE OBSERVATION  
STEREOSCOPIC 3D IMAGING

- Auto focus camera
- Built-in motor, automatic focus stacking
- PDF report can be exported
- Built-in software without computer, operated by mouse and keyboard
- Fast generation of large depth of field images
- Plane measurement and profile height measurement



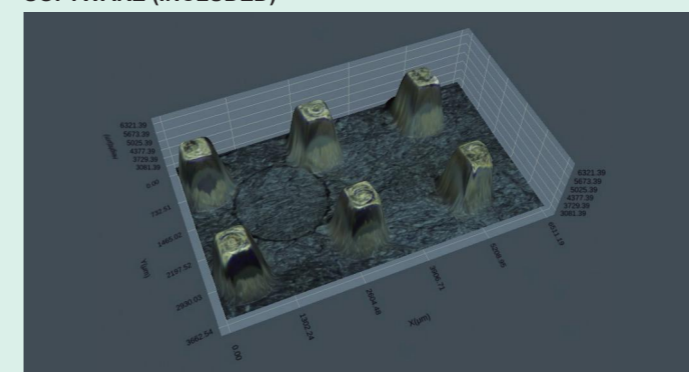
### SPECIFICATION

Code	5324-K210	5324-K220
Stand	vertical stand	tilted stand
Magnification	100X~750X	
Sensor	1/2" CMOS	
Pixel	2M	
Resolution	1920×1080	
Frame rate	60fps	
View field	0.6×0.32~4.5×2.5mm	
Working distance	30~40mm	
Plane measuring accuracy	±8μm	
Output	HDMI/LAN	
Power supply	power adapter	
Dimension (L×W×H)	570×300×430mm	340×300×695mm
Net weight	10kg	15.5kg

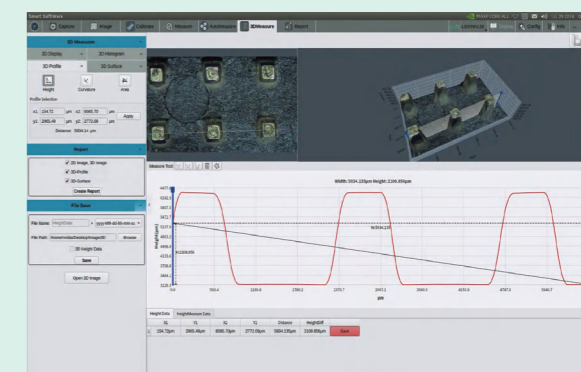
### STANDARD DELIVERY

Main unit	1 pc
Calibration block	1 set
Mouse	1 pc
Keyboard	1 pc
Display	1 pc
16G USB flash disk	1 pc
Glass calibration rule	1 pc
Power adapter	2 pcs
Stand	1 pc

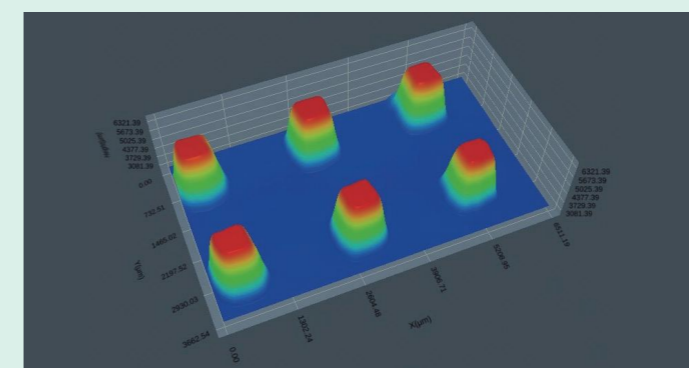
### SOFTWARE (INCLUDED)



constructing stereoscopic 3D imaging that can be dragged and rotated for viewing



fast measurement of profile height difference



the chromatogram height clearly shows the difference in three-dimensional height

### PROFILE HEIGHT MEASUREMENT ACCURACY

Objective magnification	Measuring range	Measuring accuracy
1.5X	2000μm	±20μm
2X	1200μm	±10μm
2.5X	800μm	±10μm
3X	600μm	±6μm
3.5X	400μm	±5μm
4X	320μm	±5μm
4.5X	250μm	±5μm
5X	200μm	±3μm

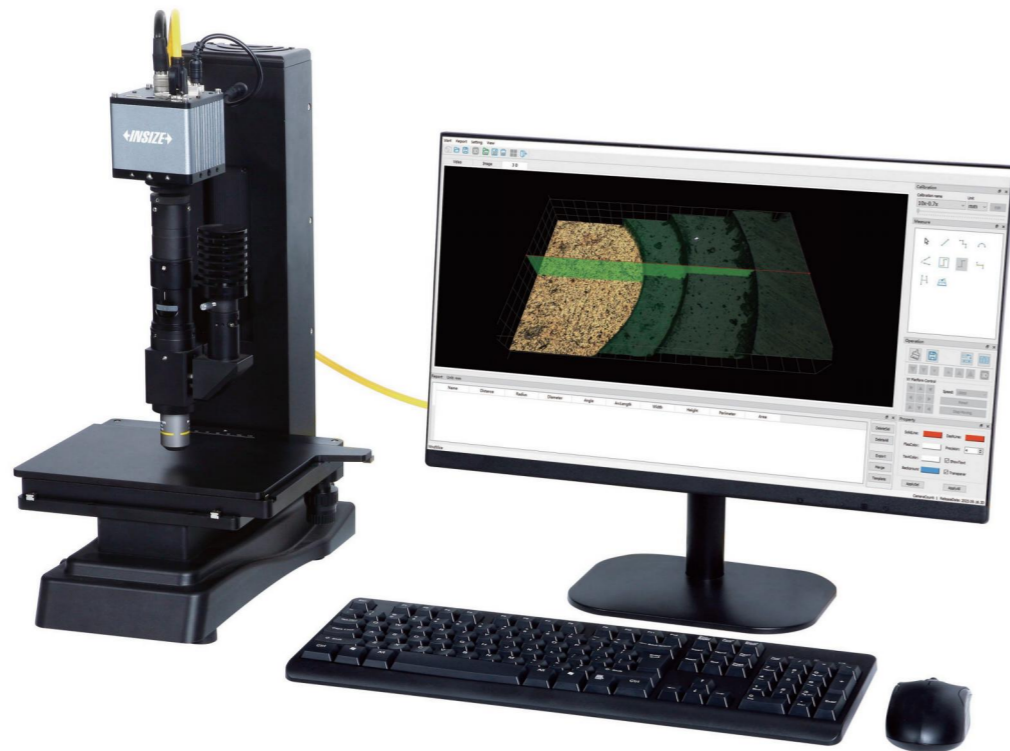
\* Measurement of profile height at 0.75X and 1X is not recommended

## LARGE DEPTH OF FIELD 3D MEASURING MICROSCOPE

### CODE 5323-D215

STEREOSCOPIC  
3D IMAGINGROTATABLE  
OBSERVATIONPROFILE HEIGHT  
MEASUREMENT

- The Z-axis is driven by high precision stepping motor
- Can be connected to display and computer at the same time
- Fast generation of large depth of field images
- Plane measurement and profile height measurement



#### SPECIFICATION

Sensor	1/1.2" CMOS
Pixel	2M
Resolution	1920×1080
Magnification (10X objective)	142~970X (on 21.5" monitor)
Z-axis measurement range	30μm~6mm
View field (10X objective)	0.29×0.16~2.0×1.2mm
Working distance	11mm
Frame rate	30fps
Stage	size: 200×180mm travel: 100×109mm
Plane measuring accuracy	±5μm
Profile measuring accuracy*	±10μm
Output	HDMI/LAN
Power supply	power adapter
Dimension (L×W×H)	230×330×500mm
Net weight	12.7kg

\* During 3D synthesis, the number of photos should be not less than 150 in order to achieve this accuracy

#### STANDARD DELIVERY

Main unit	1 pc
10X objective	1 pc
1X objective	1 pc
Power adapter	1 pc
Calibration plate	1 pc
16G USB flash disk	1 pc

#### OPTIONAL ACCESSORY

5X objective	5323-D215-5X (working distance:15mm)
20X objective	5323-D215-20X (working distance:12mm)
50X objective	5323-D215-50X (working distance:4mm)

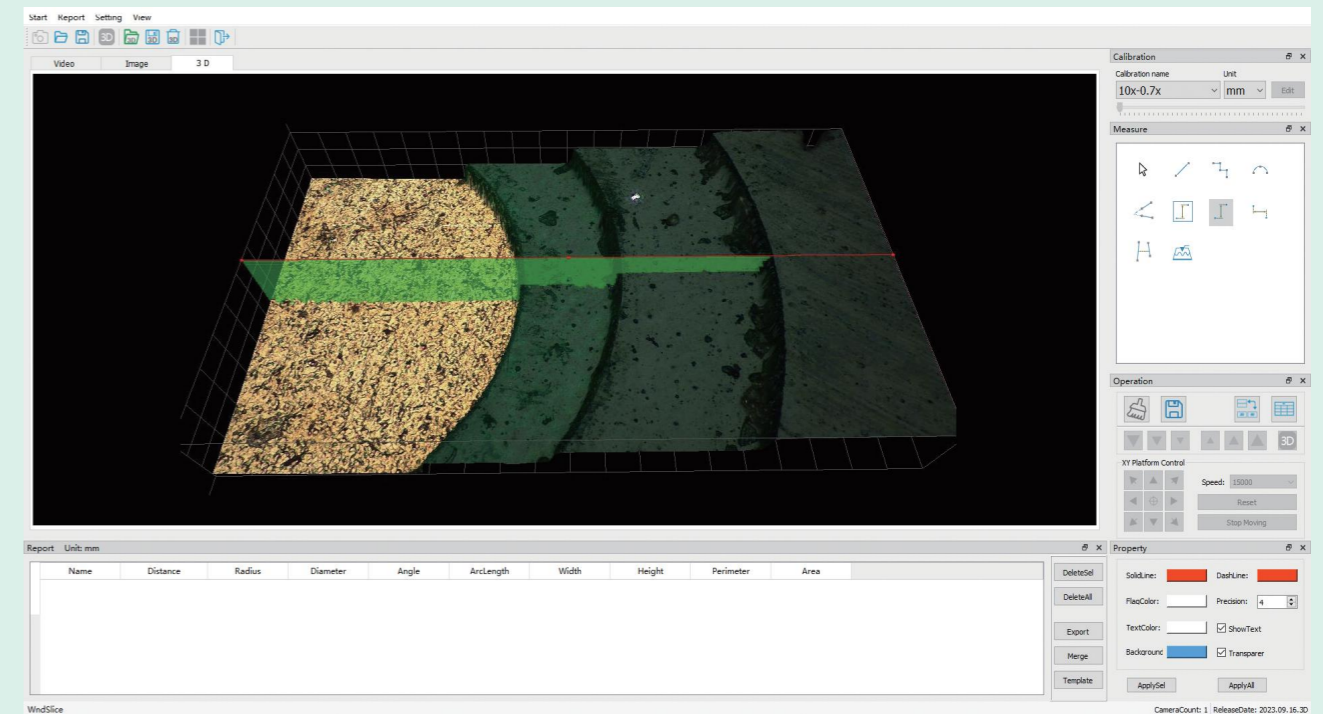
#### COMPUTER

Operation system	Win 10/11 (64 bits)
CPU	Intel Core 2 2.8GHz
Memory	16GB
LAN port	Gigabit Ethernet port

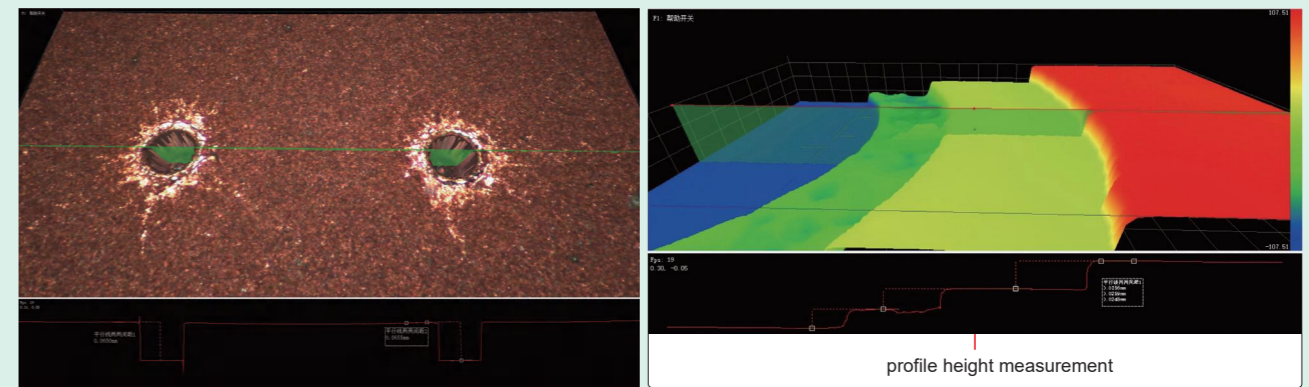
To be continued

Continued from previous page

#### SOFTWARE FOR COMPUTER (INCLUDED)



constructing stereoscopic 3D imaging that can be dragged and rotated for viewing, the cutting line can be dragged at any angle



fast generation of large depth of field images

the chromatogram height clearly shows the difference in three-dimensional height

## 02

**MEASURING MICROSCOPES**

Focused on microscopic observation and high-accuracy measurement, it offers efficient automatic edge detection. Users can select optional motorized zoom, bottom lighting, and specialized functions like depth fusion.

Boasting micron-level high measurement accuracy, it meets the requirements of precision measuring equipment. Adopting a non-contact measurement method, it causes no damage to the surface of precision components. It enables multi-dimensional measurement and simultaneously acquires various parameters such as length, angle, spacing, and circle diameter. Combined with dedicated software, it supports data saving and transmission functions, thereby improving measurement efficiency.



High-Precision  
Measurement



Multi-Dimensional  
Measurement



Data  
Transmission



Microscope Function Selection Chart

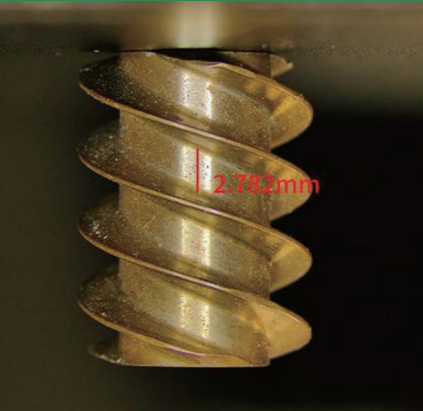
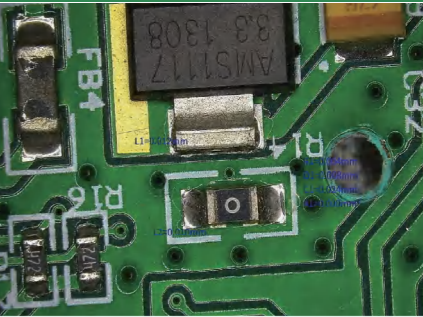
Code	All-in-one	With Bottom Illumination	4K	Motorized Zoom	With Display	Cross Hair	Focus Stacking	High-precision Edge Detection
 5326	✓		✓	✓	✓	✓		✓
 5322	✓	✓			✓	✓	✓	✓
 5307	✓	✓			✓	✓		✓
 ISM-DL300/301		✓			✓	✓		✓
 ISM-DL302					✓	✓		✓
 5310		✓	✓		✓	✓		✓
 5325	✓			✓	✓	✓	✓	
 5318					✓	✓		
 ISM-DL510		✓			✓	✓	✓	✓
 ISM-DL520					✓	✓	✓	✓
 5316					✓	✓		

focus stacking



Application Scenarios

Workpiece observation and measurement in the fields of electronics manufacturing, mechanical processing, scientific research, optics industry, and auto parts sector.



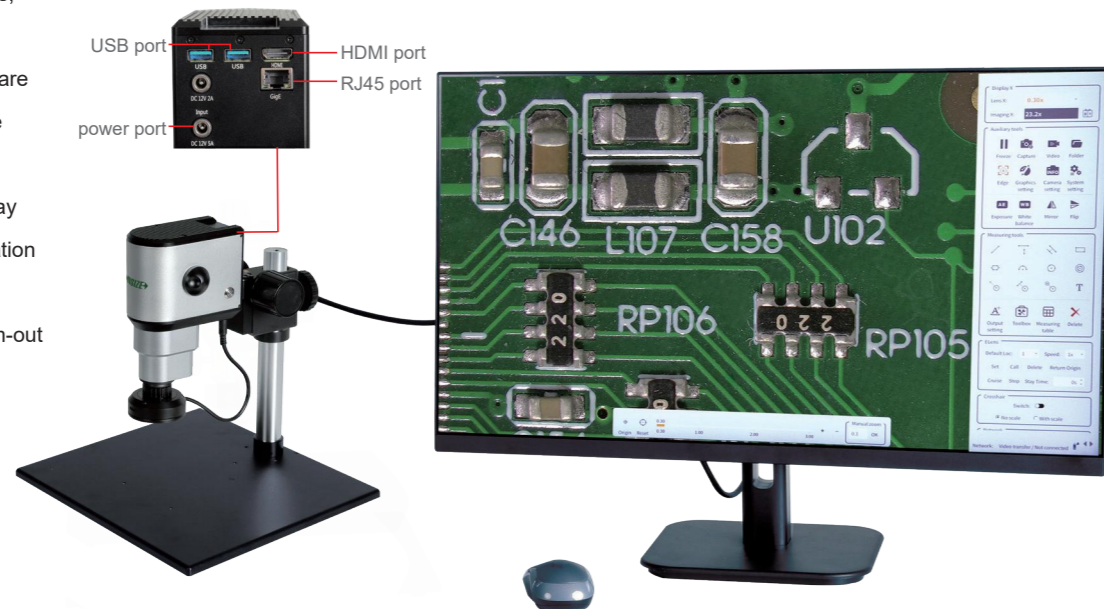
## MOTORIZED ZOOM 4K MEASURING MICROSCOPE

code 5326-S112

4K ULTRA-HIGH DEFINITION  
APOCHROMATIC LENS

DISPLAY ACTUAL  
MAGNIFICATION

- 4K high-definition image
- Take pictures and videos, save to USB flash disk
- Built-in measuring software
- Automatic white balance and exposure
- 4K 60fps real-time display
- Display actual magnification
- Display cross hair
- Automatic zoom-in/zoom-out observation



## HORIZONTAL MICROSCOPE

CODE 5316-HM810

BUILT-IN SOFTWARE  
WITHOUT COMPUTER

TAKE  
PICTURES



- 1080P high-definition image
- Built-in software without computer, operated by mouse
- Take pictures, save to USB flash disk
- Automatic white balance and exposure
- Brightness, contrast ratio, gain are adjustable
- Display cross hair (blue/green/red/yellow/black/brown colors)

### SPECIFICATION

Magnification	23.2X~232.2X
View field	2.5×1.4~25×14mm
Zoom ratio	10:1
Sensor	1/1.8" CMOS
Pixel	8M
Resolution	3840×2160
Frame rate	60fps
Output	HDMI/USB/LAN
Power supply	power adapter
Dimension (L×W×H)	330×300×318mm
Net weight	15.3kg

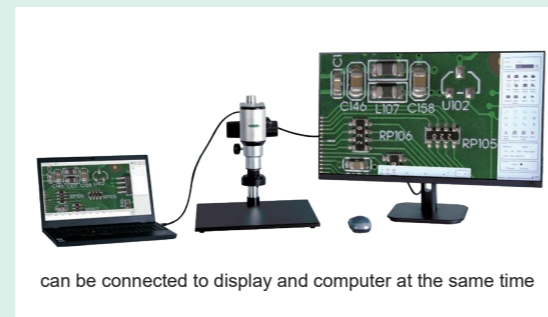
### MAGNIFICATION, VIEW FIELD AND MEASURING ACCURACY

Objective magnification	View field* (distortion-free)	Image magnification	Measuring accuracy
0.3X	7×10mm	23.2X	±10μm
1X	4×7mm	77.4X	±8μm
2X	2×3.5mm	154.8X	±6μm
3X	1.4×2.5mm	232.2X	±4μm

\* Distortion-free field of view at the center of the lens

### STANDARD DELIVERY

Main unit (with stand)	1 pc
LED illumination	1 pc
16GB USB flash disk	1 pc
Mouse	1 pc
LCD	1 pc
HDMI cable	1 pc
Calibration plate	1 pc
Power adapter	1 pc



can be connected to display and computer at the same time

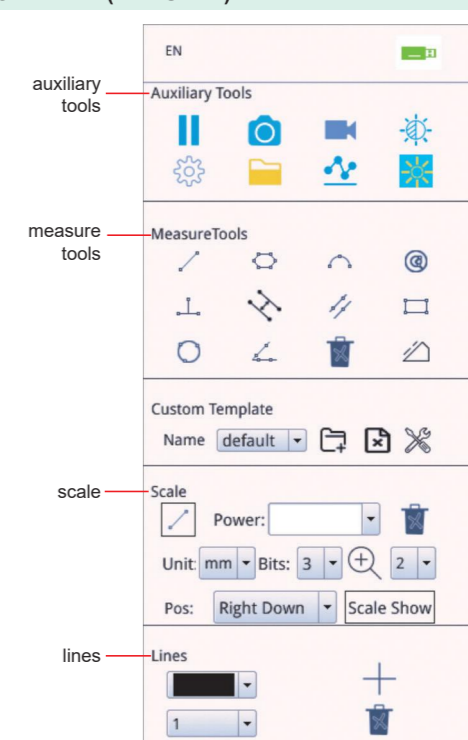
### SPECIFICATION

Magnification	10.5X~62.5X
View field	4.5×2.5~28×12.3mm
Focus distance	115mm
Measuring accuracy	±0.02mm
Sensor	1/2.8" CMOS
Pixel	2M
Resolution	1920×1080
Frame rate	1080P:60fps, 1080P:50fps
Output	HDMI
Power supply	220V, 50/60Hz
Dimension (L×W×H)	500×200×200mm
Net weight	7kg

### STANDARD DELIVERY

Main unit	1 pc
1X camera adapter	1 pc
1X auxiliary adapter	1 pc
Plastic calibration ruler	1 pc
16G USB flash disk	1 pc
Mouse	1 pc
LED ring light	1 pc

### SOFTWARE (INCLUDED)



## LARGE DEPTH OF VIEW DIGITAL MEASURING MICROSCOPES (ADVANCED TYPE)

DUAL SCREEN  
OPERATIONFOCUS  
STACKINGELECTRONIC MAGNIFICATION  
FEEDBACK LENSPROGRAMMABLE  
SEGMENTED RING LIGHT

- Electronic magnification feedback lens: when the objective lens magnification is changed manually, the software automatically selects the corresponding pre-calibration data and calibration is not needed
- Send photos and measurement data via ethernet (TCP/IP)
- Digital magnification
- Can be connected to display and computer at the same time
- Take pictures, save to USB flash disk
- Measuring results can be sent to Excel



### SPECIFICATION

Code	5322-ID250A (high magnification)	5322-ID260A (high magnification, contour illumination)	5322-ID300A (large view field)
Sensor	1/2" CMOS		
Pixel	2M		
Resolution	1920×1080		
Magnification	12~77X		6~38X
Focus distance	60mm		120mm
View field	3.2×1.8~20.9×11.7mm		6.4×3.6~41.8×23.4mm
Max. workpiece height	53mm		205mm
Frame rate	60fps		
Output	USB/HDMI/LAN		
Power supply	power adapter		
Dimension (L×W×H)	260×320×500mm		305×405×530mm
Net weight	5.2kg	5.7kg	7.6kg

### STANDARD DELIVERY

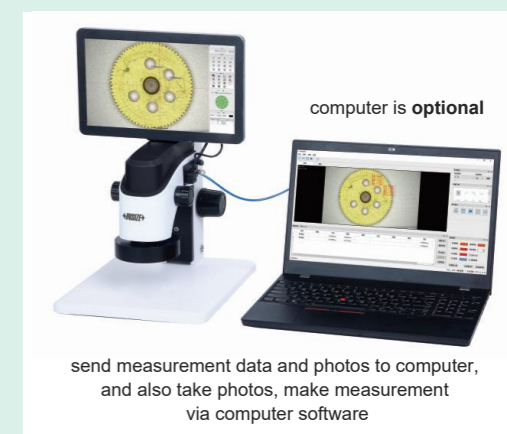
Main unit	1 pc
1X auxiliary objective (included in 5322-ID250A)	1 pc
0.5X auxiliary objective (included in 5322-ID300A)	1 pc
Calibration plate	1 pc
Power adapter	1 pc
Mouse	1 pc
16G USB flash disk	1 pc

### OPTIONAL ACCESSORY

0.75X auxiliary objective	5307-ID100A-OB075X
2X auxiliary objective	5307-ID100A-OB2X

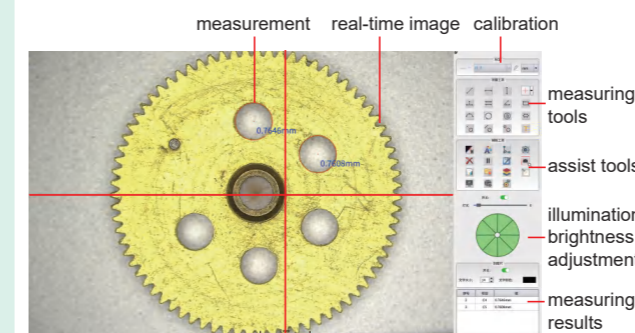
### MAGNIFICATION AND MEASURING ACCURACY

Objective magnification	5322-ID250A, 5322-ID260A		5322-ID300A	
	Magnification	Measuring accuracy	Magnification	Measuring accuracy
0.7X	12X	±9μm	6X	±15μm
1X	17X	±9μm	8X	±15μm
1.5X	26X	±8μm	13X	±9μm
2X	35X	±7μm	17X	±9μm
2.5X	43X	±7μm	21X	±9μm
3X	51X	±7μm	25X	±9μm
3.5X	60X	±6μm	30X	±8μm
4X	68X	±6μm	34X	±8μm
4.5X	77X	±5μm	38X	±7μm

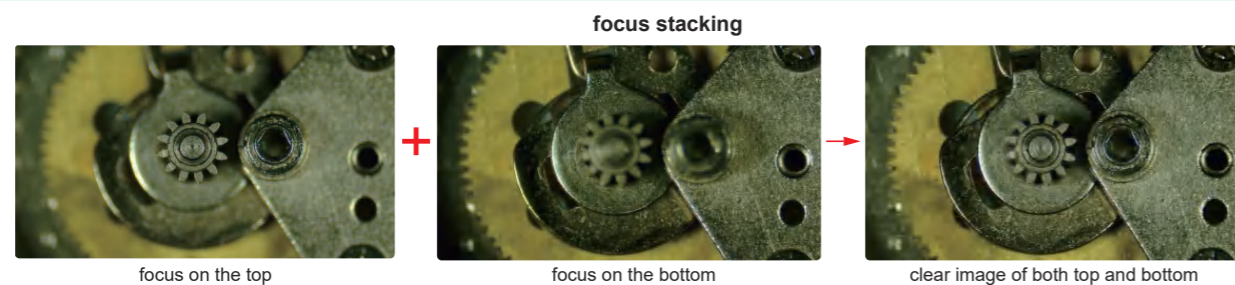
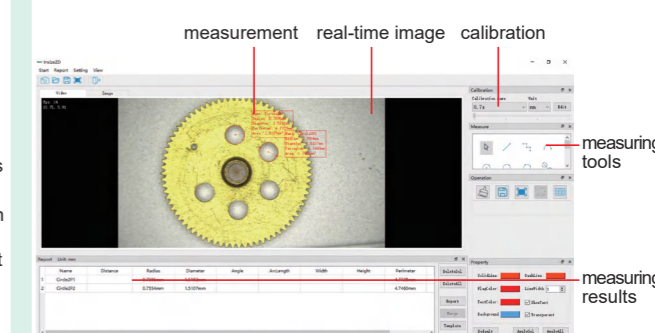


send measurement data and photos to computer, and also take photos, make measurement via computer software

### SOFTWARE FOR LCD (INCLUDED)



### SOFTWARE FOR COMPUTER (INCLUDED)



## DIGITAL MEASURING MICROSCOPES (STANDARD TYPE)

ELECTRONIC MAGNIFICATION  
FEEDBACK LENS

BUILT-IN SOFTWARE  
WITHOUT COMPUTER



- Electronic magnification feedback lens: when the objective lens magnification is changed manually, the software automatically selects the corresponding pre-calibration data and calibration is not needed
- Two methods of LED brightness adjustment, knob adjustment and software adjustment
- Built-in software without computer, operated by mouse
- Take pictures, save to USB flash disk
- Measuring results can be sent to Excel



### SPECIFICATION

Code	5307-ID100A (high magnification)	5307-ID120A (high magnification, contour illumination)	5307-ID200A (large view field)
Sensor	1/2" CMOS		
Pixel	2M		
Resolution	1920×1080		
Magnification	12~77X		6~38X
Focus distance	65mm		130mm
View field	3.2×1.8~20.9×11.7mm		6.4×3.6~41.8×23.4mm
Max. workpiece height	60mm		210mm
Frame rate	60fps		
Output	USB/HDMI		
Power supply	power adapter		
Dimension (L×W×H)	260×320×500mm		305×405×530mm
Net weight	5.2kg	5.7kg	7.6kg

### STANDARD DELIVERY

Main unit	1 pc
1X auxiliary objective (included in 5307-ID100A, 5307-ID120A)	1 pc
0.5X auxiliary objective (included in 5307-ID200A)	1 pc
Calibration plate	1 pc
Power adapter	1 pc
Mouse	1 pc
16G USB flash disk	1 pc

### OPTIONAL ACCESSORY

0.75X auxiliary objective	5307-ID100A-OB075X
2X auxiliary objective	5307-ID100A-OB2X

### MAGNIFICATION AND MEASURING ACCURACY

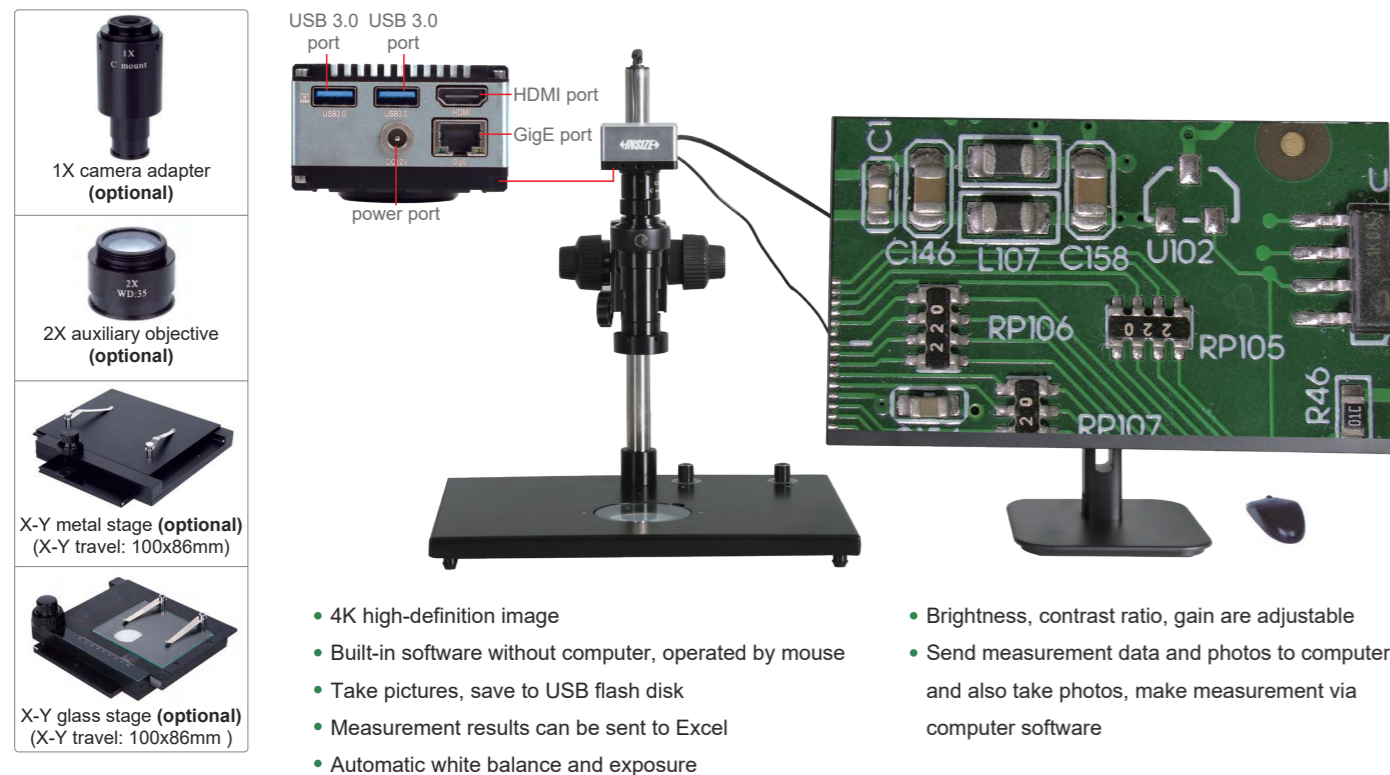
Objective magnification	5307-ID100A, 5307-ID120A		5307-ID200A	
	Magnification	Measuring accuracy	Magnification	Measuring accuracy
0.7X	12X	±9μm	6X	±15μm
1X	17X	±9μm	8X	±15μm
1.5X	26X	±8μm	13X	±9μm
2X	35X	±7μm	17X	±9μm
2.5X	43X	±7μm	21X	±9μm
3X	51X	±7μm	25X	±9μm
3.5X	60X	±6μm	30X	±8μm
4X	68X	±6μm	34X	±8μm
4.5X	77X	±5μm	38X	±7μm

### SOFTWARE (INCLUDED)



## 4K DIGITAL MEASURING MICROSCOPE CODE 5310-DL401

MEASUREMENT

BUILT-IN SOFTWARE  
WITHOUT COMPUTERTAKE  
PICTURES

### SPECIFICATION

Magnification	32X~210X (27" LCD)
Sensor	1/2.3" CMOS
Pixel	8M
Resolution	3840×2160
Frame rate	4K:30fps, 1080P:60fps
Output	HDMI
Power supply	power adapter
Dimension (LxWxH)	570×300×430mm
Net weight	6.5kg

### STANDARD DELIVERY

Main unit	1 pc
LCD	1 pc
0.5X camera adapter	1 pc
1X auxiliary objective	1 pc
Calibration plate	1 pc
16G USB flash disk	1 pc
White/black plate	1 pc
Mouse	1 pc
HDMI cable	1 pc
Power adapter	3 pcs

### MAGNIFICATION, VIEW FIELD AND MEASURING ACCURACY

Objective magnification	Image magnification	View field	Measuring accuracy
0.75X	32X	15×10.5mm	±5μm
1X	42X	11.5×8.0mm	±5μm
1.5X	63X	8.0×5.1mm	±5μm
2X	84X	6.0×4.0mm	±5μm
2.5X	105X	4.8×3.0mm	±4μm
3X	126X	3.8×2.8mm	±4μm
3.5X	147X	3.2×2.2mm	±4μm
4X	168X	3.0×2.0mm	±3μm
4.5X	189X	2.8×1.8mm	±3μm
5X	210X	2.2×1.6mm	±3μm

### OPTIONAL ACCESSORY

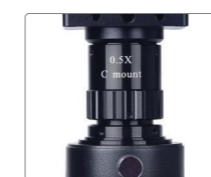
1X camera adapter	ISM-DL-CA1X
2X auxiliary objective	ISM-DL-OB2X
X-Y glass stage (travel:74x60mm)	ISM-DL-STAGE
X-Y metal stage (travel:100x86mm)	ISM-DL-STAGE1

## HIGH MAGNIFICATION MEASURING MICROSCOPE CODE ISM-DL302

SOFTWARE IS INCLUDED

OBSERVATION AND MEASUREMENT  
AT HIGH MAGNIFICATION

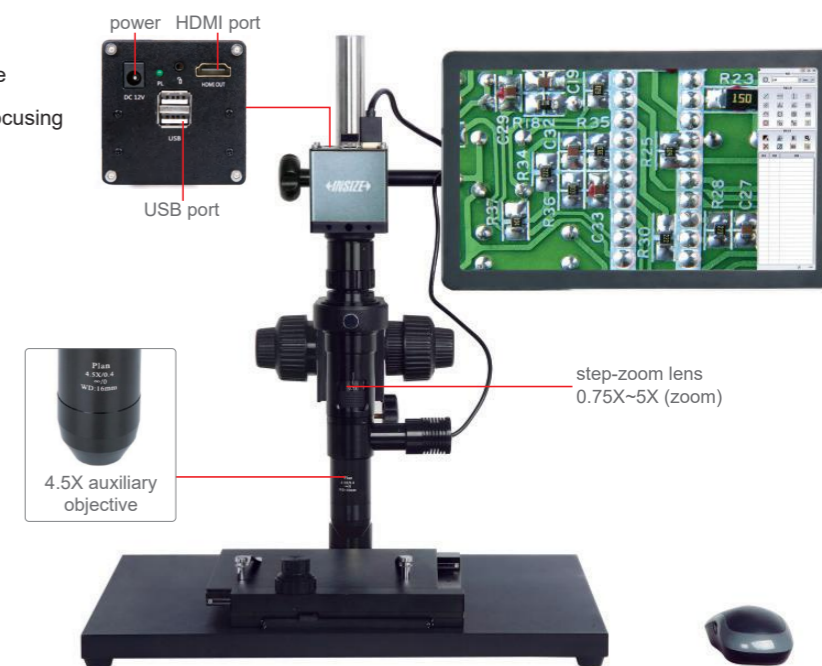
- 1080P high-definition image
- Maximum 920X optical magnification (using camera adapter 1X, optional)
- Built-in software without computer, operated by mouse
- Solid base and column to avoid lens shaking during focusing
- Software is included



0.5X camera adapter (included)



1X camera adapter (optional)



### SPECIFICATION

Magnification	70X~460X
Sensor	1/2" CMOS
Pixel	2M
Resolution	1920×1080
Frame rate	60fps
Output	HDMI
Power supply	power adapter
Dimension (L×W×H)	570×300×430mm
Net weight	15kg

### SATNDARD DELIVERY

Main unit	1 pc
0.5X camera adapter	1 pc
4.5X auxiliary objective	1 pc
Calibration plate	1 pc
16G USB flash disk	1 pc
Mouse	1 pc
HDMI cable	1 pc
X-Y metal stage	1 pc

### MAGNIFICATION AND MEASURING ACCURACY

Objective magnification	Image magnification	Measuring accuracy
0.75X	70X	±5μm
1X	90X	±4μm
1.5X	140X	±4μm
2X	180X	±4μm
2.5X	230X	±4μm
3X	275X	±4μm
3.5X	320X	±4μm
4X	370X	±4μm
4.5X	410X	±4μm
5X	460X	±4μm

### OPTIONAL ACCESSORY

1X camera adapter	ISM-DL-CA1X
-------------------	-------------

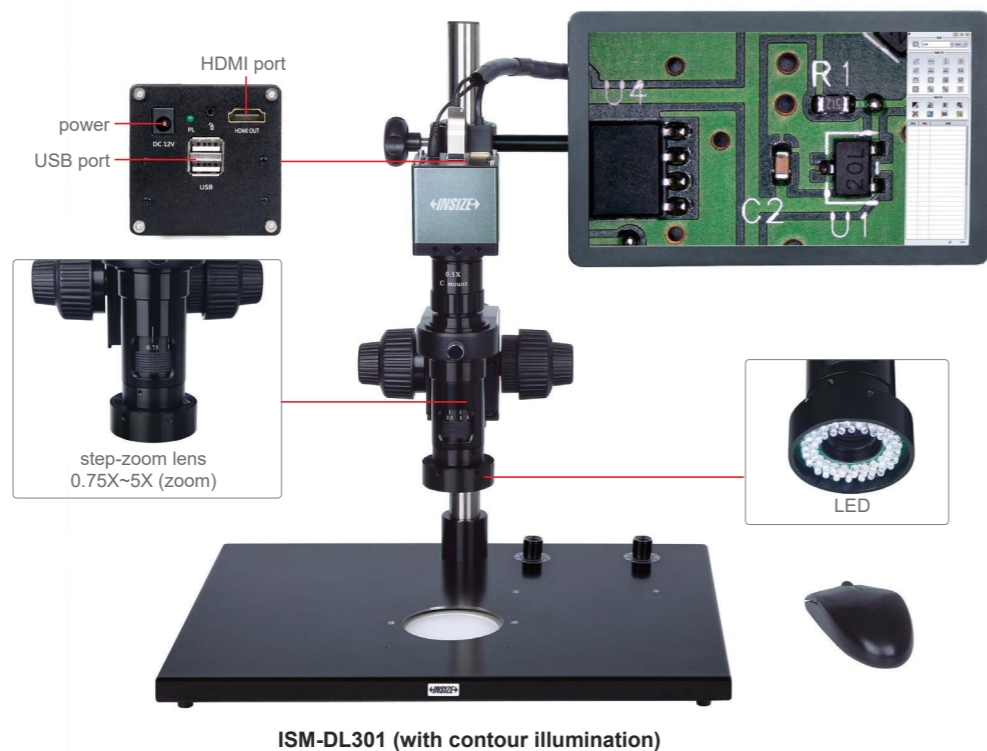
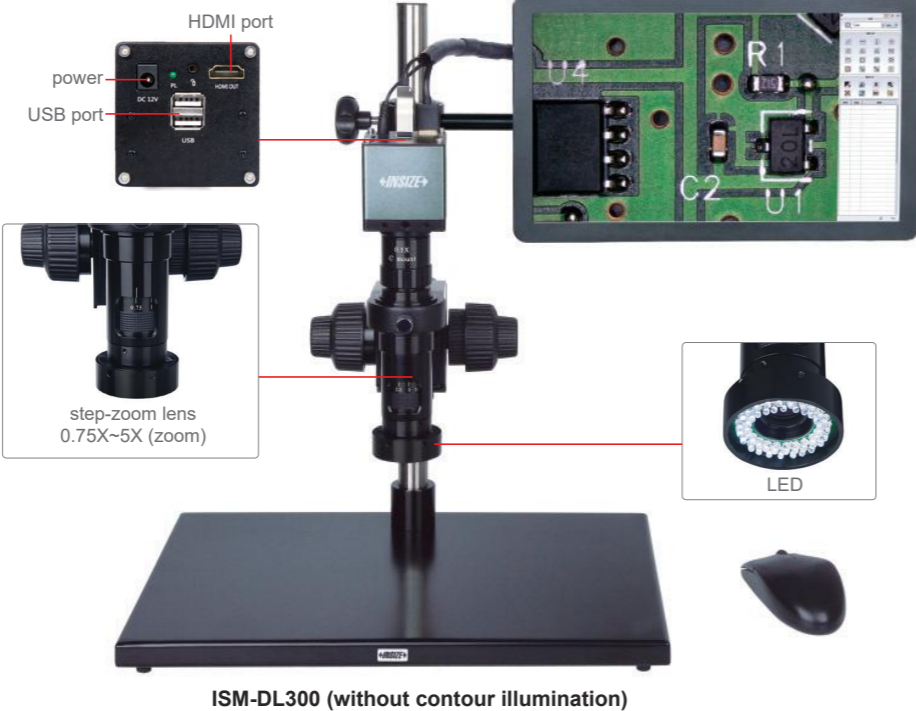
### MAGNIFICATION, FOCUS DISTANCE AND VIEW FIELD

Camera adapter	0.5X (included)	1X (optional)
Magnification	70~460X	140~920X
Focus distance	14±2mm	14±2mm
View field	2.8×1.7~0.5×0.3mm	1.4×0.9~0.3×0.2mm

## DIGITAL MEASURING MICROSCOPES

BUILT-IN SOFTWARE WITHOUT COMPUTER MEASUREMENT TAKE PICTURES

- 1080P high-definition image
- Built-in software without computer, operated by mouse
- Take pictures, save to USB flash disk
- Measurement results can be sent to Excel
- Automatic white balance and exposure
- Brightness, contrast ratio, gain are adjustable



To be continued

Continued from previous page

### SPECIFICATION

Code	ISM-DL300 (without contour illumination)	ISM-DL301 (with contour illumination)
Magnification	15X~100X	
Sensor	1/2" CMOS	
Pixel	2M	
Resolution	1920×1080	
Frame rate	60fps	
Output	HDMI	
Power supply	power adapter	
Dimension (L×W×H)	570×300×430mm	
Net weight	6.5kg	

### STANDARD DELIVERY

Main unit	1 pc
0.5X camera adapter	1 pc
1X auxiliary objective	1 pc
Calibration plate	1 pc
16G USB flash disk	1 pc
White/black plate	1 pc
Mouse	1 pc
HDMI cable	1 pc
Power adapter	2 pcs

### MAGNIFICATION, FOCUS DISTANCE AND VIEW FIELD

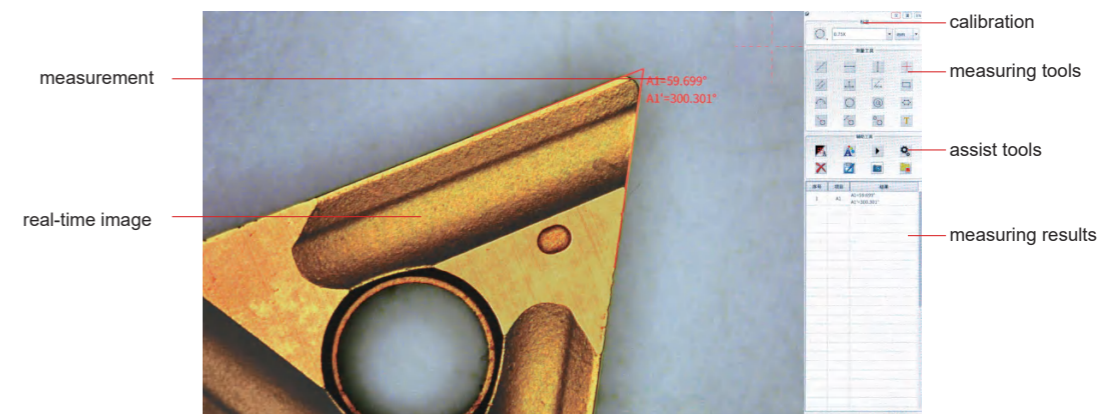
Auxiliary objective	Specification	Camera adapter	
		0.5X (included)	1X (optional)
1X (included)	magnification	15~100X	30~200X
	focus distance	70±2mm	70±2mm
	view filed	16×11~2.5×1.6mm	7.8×5.3~1.2×0.8mm
2X (optional)	magnification	30~200X	60~400X
	focus distance	29±2mm	29±2mm
	view filed	7.8×5.3~1.2×0.8mm	3.8×2.7~0.6×0.4mm

### MAGNIFICATION AND MEASURING ACCURACY

Objective magnification	Image magnification	Measuring accuracy*
0.75X	15X	±8μm
1X	20X	±7μm
1.5X	30X	±6μm
2X	40X	±6μm
2.5X	50X	±6μm
3X	60X	±5μm
3.5X	70X	±5μm
4X	80X	±4μm
4.5X	90X	±4μm
5X	100X	±4μm

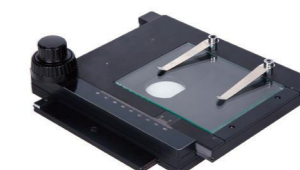
\* When measuring the contour of workpieces, please use ISM-DL301 to ensure accuracy.

### SOFTWARE (INCLUDED)



### OPTIONAL ACCESSORY

1X camera adapter	ISM-DL-CA1X
2X auxiliary objective	ISM-DL-OB2X
X-Y glass stage (travel: 100×86mm)	ISM-DL-STAGE
X-Y metal stage	ISM-DL-STAGE1



X-Y glass stage (optional)  
(X-Y travel: 100×86mm)



## MOTORIZED ZOOM MICROSCOPE (BASIC TYPE)

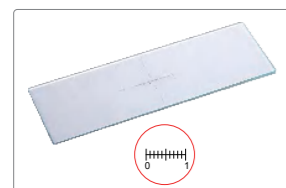
**CODE 5325-VM100**

DISPLAY ACTUAL MAGNIFICATION

PROGRAMMABLE SEGMENTED RING LIGHT

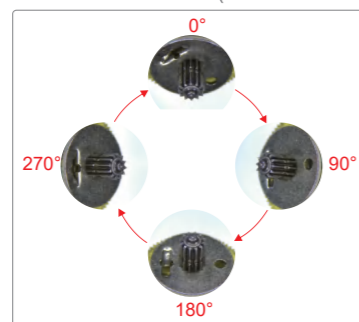
- Built-in software without computer
- Can be connected to display and computer at the same time
- Motorized zoom objective
- Display actual magnification
- Programmable segmented ring light
- Take pictures and videos

POPULAR  
MODEL



glass calibration ruler  
(graduation 0.1mm, included)

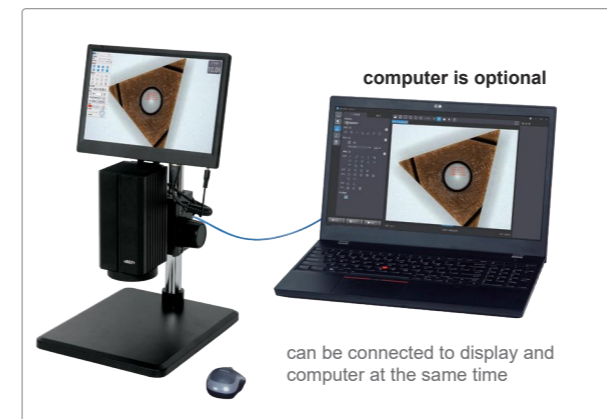
360° rotation observation (3D lens is needed)



four-zone LED ring light



1X auxiliary objective



computer is optional

can be connected to display and computer at the same time



2D/3D switching, 360° rotation  
3D lens (optional)



focus stacking



focus on the top



focus on the bottom



clear image of both top and bottom

### SPECIFICATION

Sensor	1/2" CMOS
Pixel	2M
Resolution	1920×1080
Magnification	10~68.5X
Measuring accuracy	±0.02mm
Max. workpiece height	245mm
Frame rate	60fps
Output	USB/LAN/HDMI
Power supply	power adapter
Dimension (L×W×H)	261×320×480mm
Net weight	5.1kg

### STANDARD DELIVERY

Main unit	1 pc
Glass calibration ruler	1 pc
Power adapter	1 pc
Mouse	1 pc
16G USB flash disk	1 pc
White/black plate	1 pc
Network cable	1 pc
Shortcut keyboard	1 pc

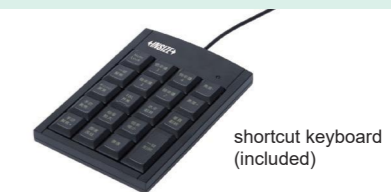
### OPTIONAL ACCESSORY

0.5X auxiliary objective	5325-VM100-OB05X
3D lens	5325-VM100-3D

\* Measurement is not recommended with 0.5X auxiliary objective

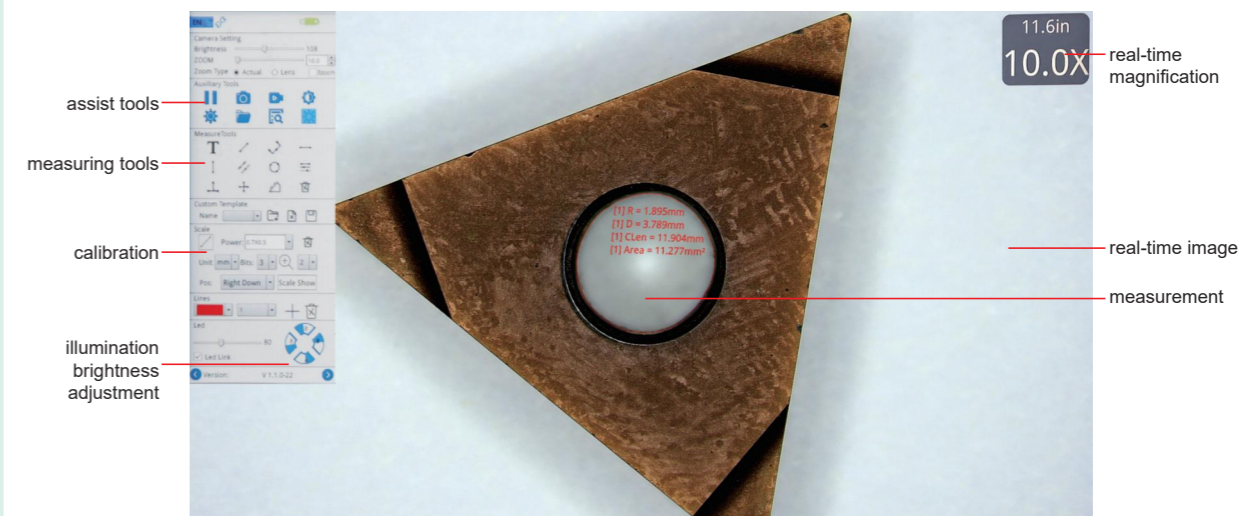
### MAGNIFICATION, FOCUS DISTANCE AND VIEW FIELD (on 11.6" LCD)

Specification	Objective	
	0.5X (optional)	1X (included)
Magnification	5~34.2X	10~68.5X
Focus distance	185mm	95mm
View field	7.4×4.2~53×31.2mm	3.7×2.1~26.5×15.6mm



shortcut keyboard  
(included)

### SOFTWARE FOR LCD (INCLUDED)



assist tools

measuring tools

calibration

illumination  
brightness  
adjustment

11.6in  
10.0X real-time  
magnification

real-time image

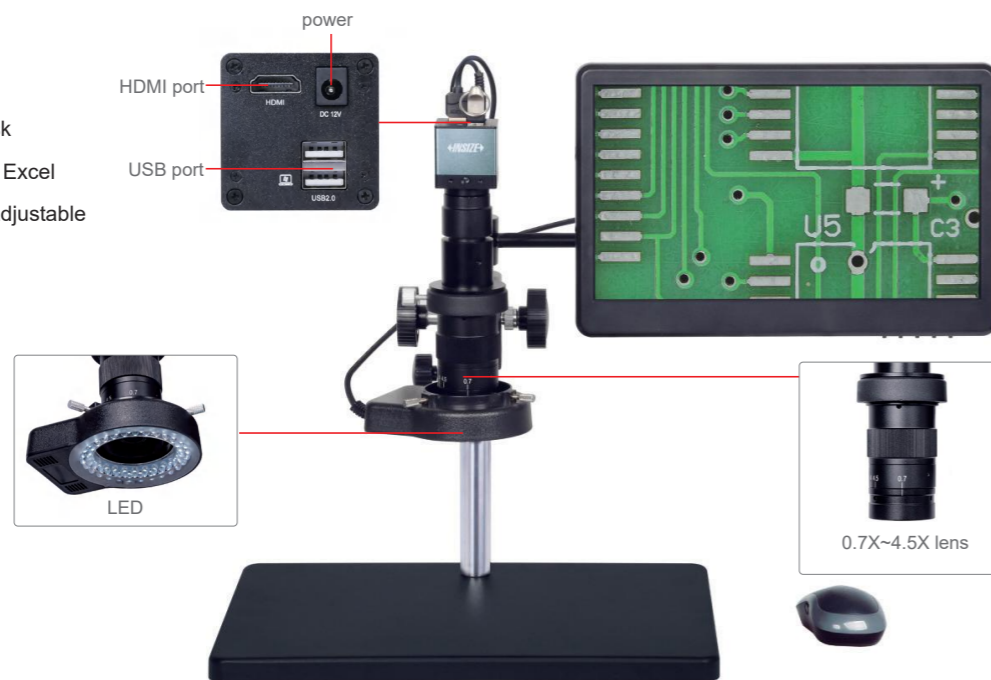
measurement

## DIGITAL MEASURING MICROSCOPES (BASIC TYPE)

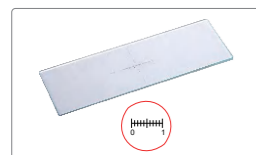
MEASUREMENT

BUILT-IN SOFTWARE  
WITHOUT COMPUTERTAKE  
PICTURES

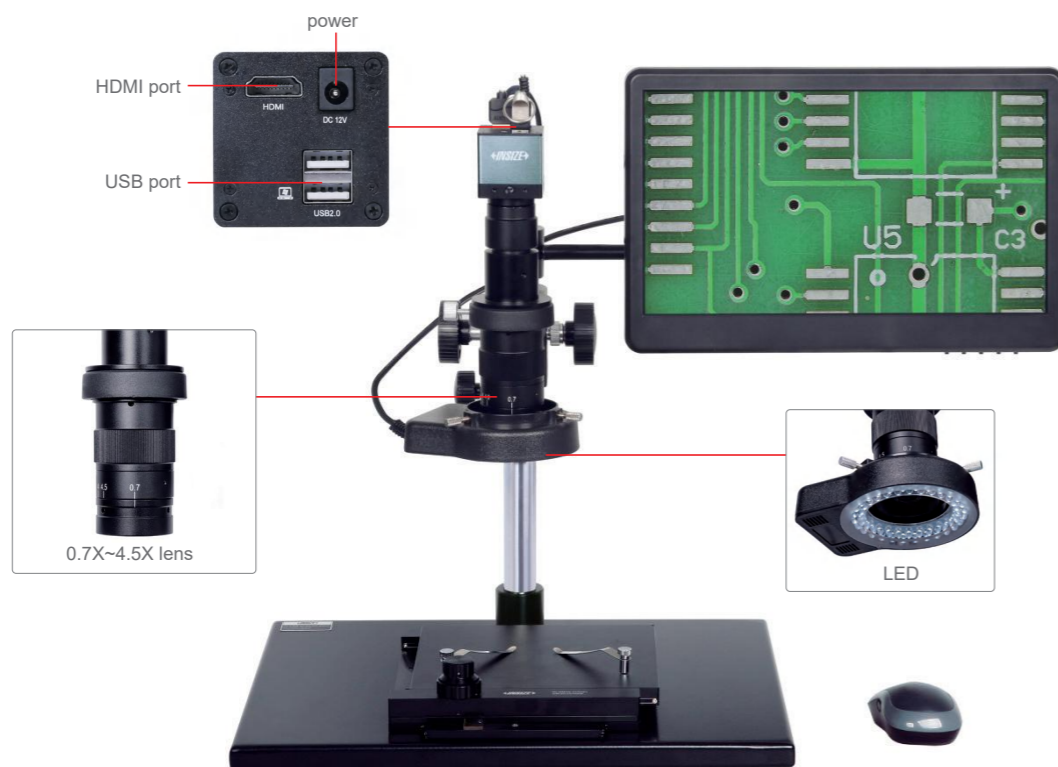
- 1080P high-definition image
- Built-in software without computer, operated by mouse
- Take pictures, save to USB flash disk
- Measurement results can be sent to Excel
- Brightness, contrast ratio, gain are adjustable

POPULAR  
MODEL

5318-MD60 (without stage)

glass calibration ruler  
(graduation 0.1mm, included)

white/black plate (included)



5318-MD60-XY (with stage)

To be continued

Continued from previous page

## SPECIFICATION

Code	5318-MD60 (without stage)	5318-MD60-XY (with stage)
Magnification	12.5X~80X	12.5X~80X
Sensor	1/2" CMOS	1/2" CMOS
Pixel	2M	2M
Resolution	1920×1080	1920×1080
Frame rate	60fps	60fps
Measuring accuracy	±0.02mm	±0.02mm
Lines	cross lines, scale lines (number, color and position of lines are adjustable)	cross lines, scale lines (number, color and position of lines are adjustable)
Output	HDMI	HDMI
Power supply	power adapter	power adapter
Dimension (L×W×H)	380×260×350mm	570×300×430mm
Net weight	4.5kg	10kg

## STANDARD DELIVERY

Code	5318-MD60 (without stage)	5318-MD60-XY (with stage)
Main unit	1 pc	1 pc
0.5X camera adapter	1 pc	1 pc
1X auxiliary objective	1 pc	1 pc
White/black plate	1 pc	1 pc
Glass calibration ruler	1 pc	1 pc
16G USB flash disk	1 pc	1 pc
Mouse	1 pc	1 pc
HDMI cable	1 pc	1 pc
Power adapter	3 pcs	3 pcs
X-Y metal stage	/	1 pc

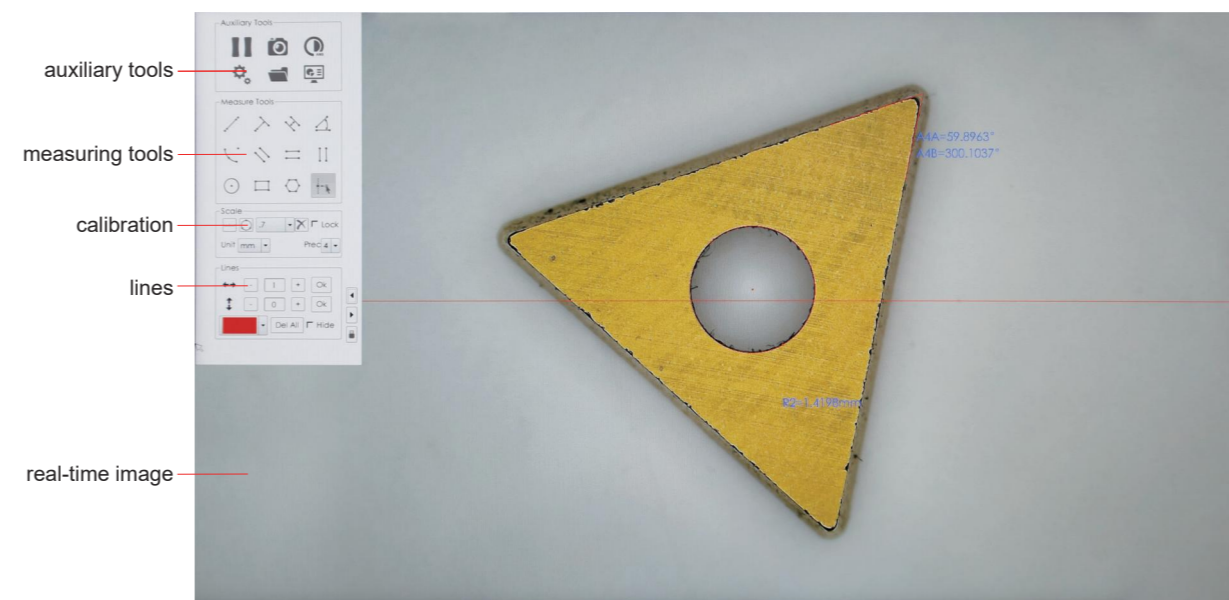
## MAGNIFICATION AND VIEW FIELD

Auxiliary objective	Specification	Camera adapter 0.5X (included)
0.5X (optional)	magnification	6.2~40X
	view field	47×26~7.4×4mm
1X (included)	magnification	12.5~80X
	view field	23.5×13~3.7×2mm
2X (optional)	magnification	25~160X
	view field	11.8×6.5~1.8×1mm

## OPTIONAL ACCESSORY

0.5X auxiliary objective	5318-OB05X
2X auxiliary objective	5318-OB2X

## MEASURING SOFTWARE (INCLUDED)



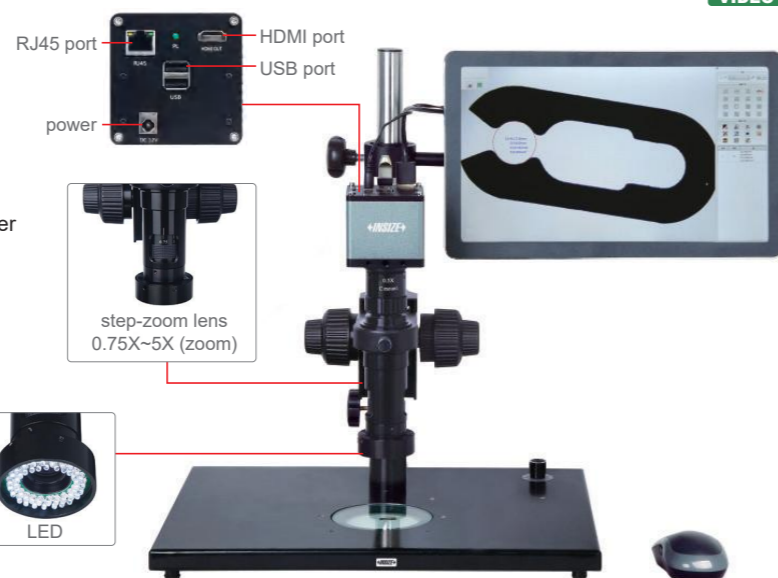
## MANUAL FOCUS STACKING MICROSCOPE (LARGE DEPTH OF VIEW)

**CODE ISM-DL510**

BUILT-IN SOFTWARE  
WITHOUT COMPUTER

FOCUS  
STACKING

- 1080P high-definition image
- Built-in software without computer, operated by mouse
- Take pictures, save to USB flash disk
- Measurement results can be sent to Excel
- Automatic white balance and exposure
- Focus stacking
- Send photos and measurement data via ethernet (TCP/IP)
- Name photos and measurement data files with serial number of workpieces read by scanner



0.5X camera adapter (included)



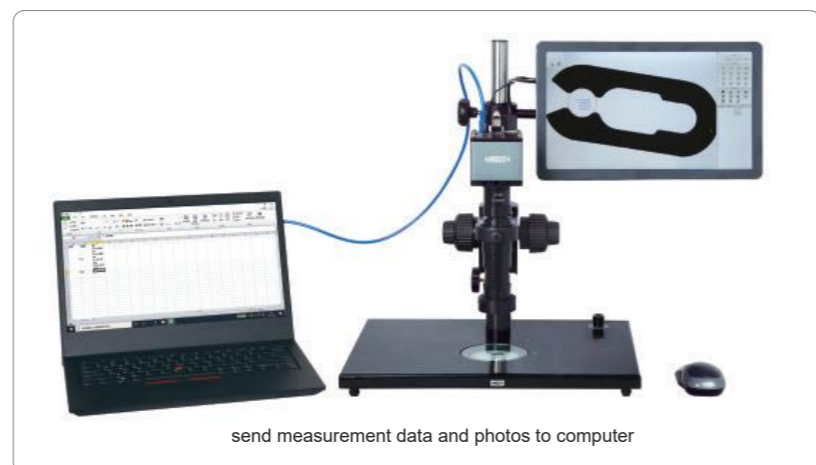
1X auxiliary objective (included)



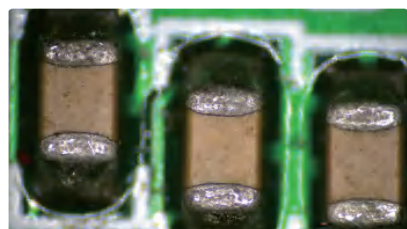
1X camera adapter (optional)



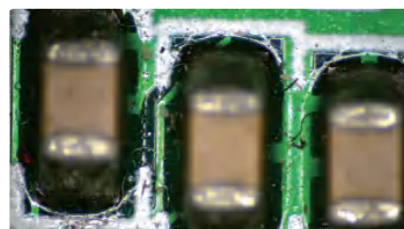
2X auxiliary objective (optional)



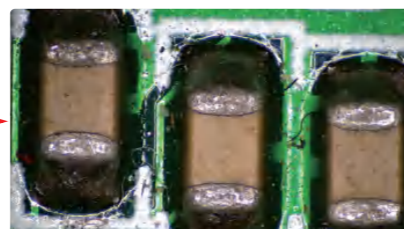
### focus stacking



focus on the top



focus on the bottom



clear image of both top and bottom

To be continued

Continued from previous page

### SPECIFICATION

Magnification	15X~100X
Sensor	1/2" CMOS
Pixel	2M
Resolution	1920×1080
Frame rate	60fps
Output	HDMI
Power supply	power adapter
Dimension (L×W×H)	570×300×430mm

### STANDARD DELIVERY

Main unit	1 pc
0.5X camera adapter	1 pc
1X auxiliary objective	1 pc
Calibration plate	1 pc
16G USB flash disk	1 pc
White/black plate	1 pc
Mouse	1 pc
Power adapter	3 pcs

### MAGNIFICATION, FOCUS DISTANCE AND VIEW FIELD

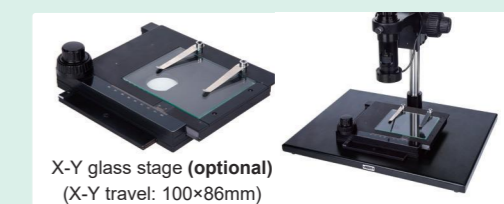
Auxiliary objective	Specification	Camera adapter	
		0.5X (included)	1X (optional)
1X (included)	magnification	15~100X	30~200X
	focus distance	70±2mm	70±2mm
	view filed	16×11~2.5×1.6mm	7.8×5.3~1.2×0.8mm
2X (optional)	magnification	30~200X	60~400X
	focus distance	29±2mm	29±2mm
	view filed	7.8×5.3~1.2×0.8mm	3.8×2.7~0.6×0.4mm

### MAGNIFICATION AND MEASURING ACCURACY

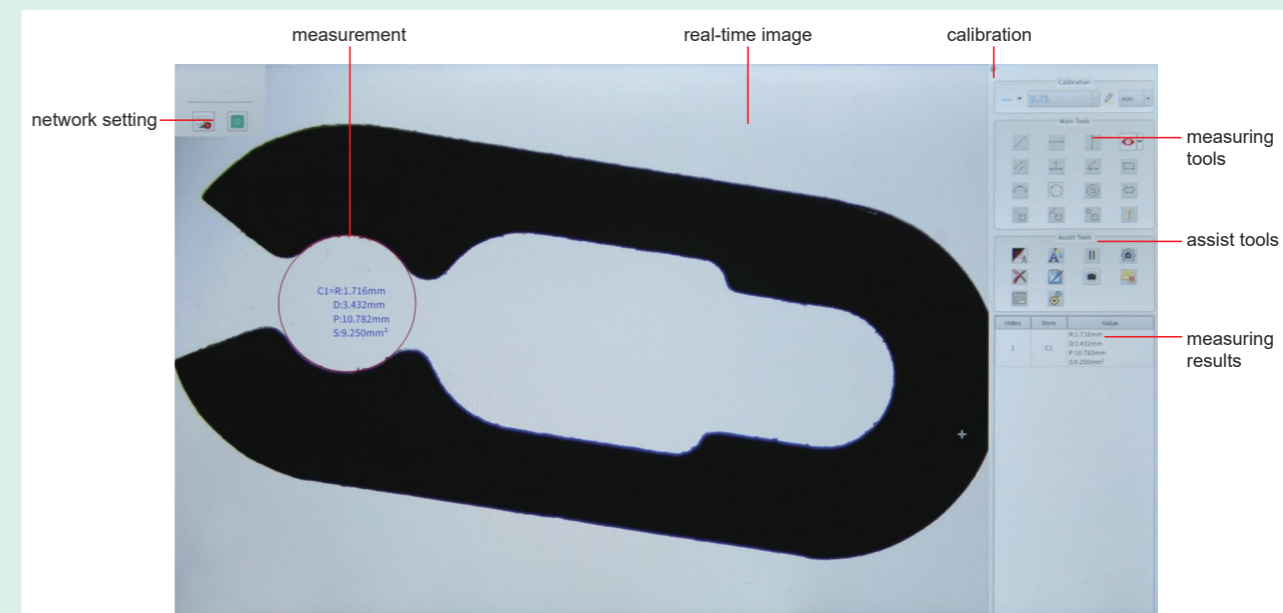
Objective magnification	Image magnification	Measuring accuracy
0.75X	15X	±8μm
1X	20X	±7μm
1.5X	30X	±6μm
2X	40X	±6μm
2.5X	50X	±6μm
3X	60X	±5μm
3.5X	70X	±5μm
4X	80X	±4μm
4.5X	90X	±4μm
5X	100X	±4μm

### OPTIONAL ACCESSORY

1X camera adapter	ISM-DL-CA1X
2X auxiliary objective	ISM-DL-OB2X
X-Y glass stage (travel: 100×86mm)	ISM-DL-STAGE1
Scanner and hub	7328-SCAN



### SOFTWARE (INCLUDED)



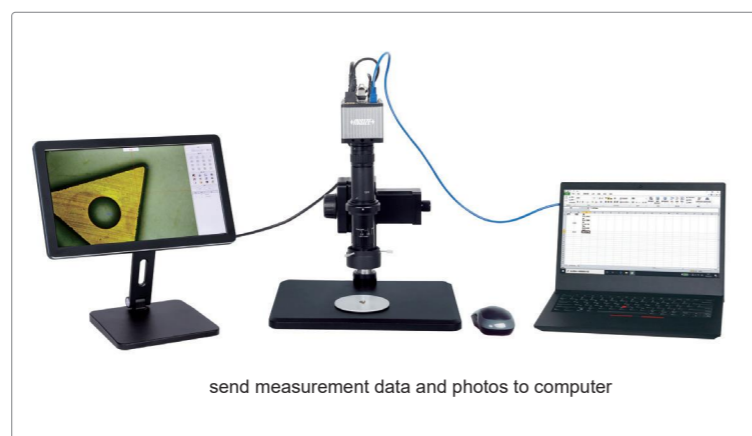
## MOTORIZED FOCUS STACKING MICROSCOPE CODE ISM-DL520

MOTORIZED FOCUS  
STACKING

BUILT-IN SOFTWARE  
WITHOUT COMPUTER



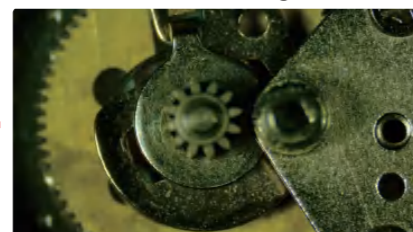
- 1080P high-definition image
- Built-in software without computer, operated by mouse
- Take pictures, save to USB flash disk
- Measurement results can be sent to Excel
- Automatic white balance and exposure
- Motorized focus stacking
- Send photos and measurement data via ethernet (TCP/IP)
- Name photos and measurement data files with serial number of workpieces read by scanner



### focus stacking



focus on the top



focus on the bottom



clear image of both top and bottom

To be continued

Continued from previous page

### SPECIFICATION

Magnification	14.7X~122.7X
View field	2.3×1.2~19.5×11mm
Focus distance	65mm
Sensor	1/1.2" CMOS
Pixel	2M
Resolution	1920×1080
Frame rate	30fps
Output	RJ45
Power supply	power adapter
Dimension (L×W×H)	320×260×500mm
Net weight	7kg

### MAGNIFICATION AND MEASURING ACCURACY

Objective magnification	Image magnification	Measuring accuracy
0.6X	14.7X	±8μm
0.8X	19.6X	±7μm
1X	24.5X	±6μm
1.5X	36.8X	±6μm
2X	49.1X	±6μm
2.5X	61.3X	±5μm
3X	73.6X	±5μm
3.5X	85.9X	±4μm
4X	98.2X	±4μm
4.5X	110.4X	±4μm
5X	122.7X	±4μm

### STANDARD DELIVERY

Main unit	1 pc
1X camera adapter	1 pc
1X auxiliary objective	1 pc
Calibration plate	1 pc
16G USB flash disk	1 pc
Mouse	1 pc
LED ring light	1 pc
White/black plate	1 pc
Power adapter	3 pcs

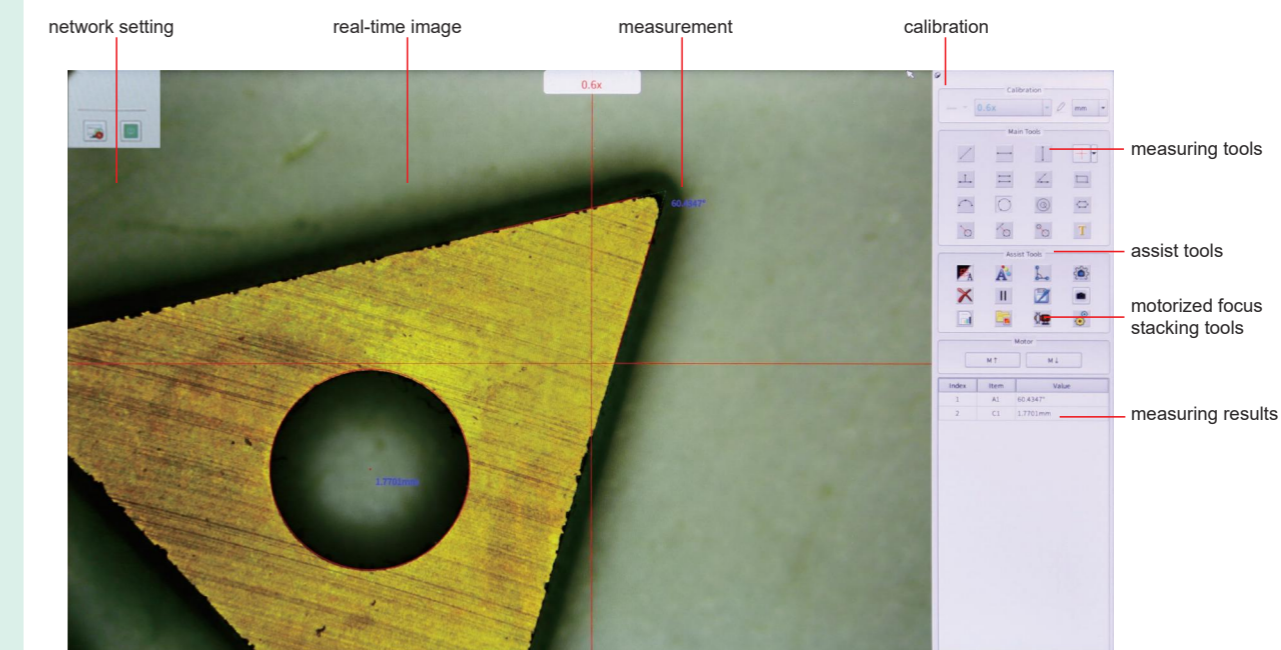


X-Y metal stage (optional)  
(X-Y travel: 100×86mm)

### OPTIONAL ACCESSORY

X-Y metal stage (travel: 100×86mm) ISM-DL-STAGE1

### SOFTWARE (INCLUDED)



## 03

## AUTO FOCUS MICROSCOPES

No manual focusing is required; it can quickly achieve a clear image, and products with different field-of-view sizes are available for selection.

Manual focus adjustment is not required; focusing can be completed with one click or automatically, which greatly saves operation time. It features high focusing accuracy and strong consistency, avoiding subjective errors caused by manual operation. It supports continuous observation or batch sample inspection, and can be linked with automated platforms to improve detection efficiency. It is compatible with the switching of high and low magnification objective lenses, enabling rapid locking of clear imaging at different magnifications.









Auto Focus



Clear Imaging

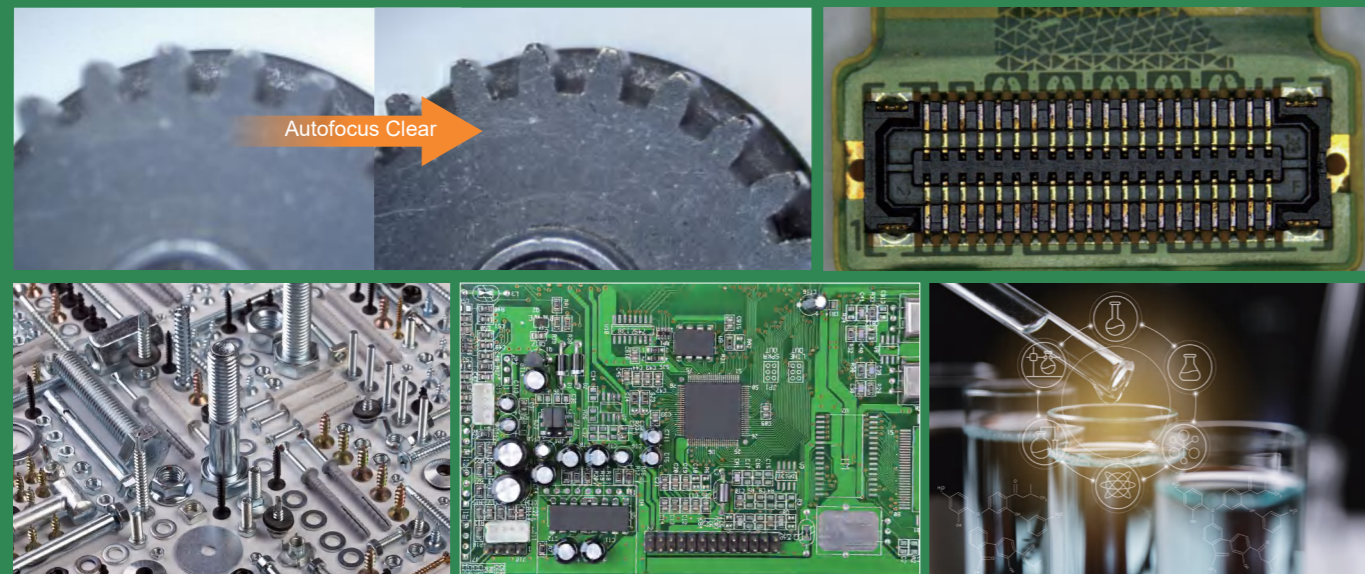


Microscope Function Selection Chart

Code	Large View Field	Motorized Zoom	With Display	With Reticle	With Measurement Function (Switch to Manual Focus)	Multi-functional Stand
 5319		✓	✓	✓	✓	
 5315			✓	✓	✓	
 5302	✓	✓		✓	✓	✓
 5320	✓	✓		✓	✓	
 5303			✓	✓	✓	
 5317			✓	✓	✓	✓

## Application Scenarios

Batch visual and dimensional sampling inspection for semiconductor chips, electronic components, materials science research, PCB circuit defect detection, precision molds, and micro hardware parts.



## AUTO FOCUS DIGITAL MICROSCOPE (ADVANCED TYPE) CODE 5319-AF290

NO CALIBRATION AFTER ZOOM	MEASUREMENT TAKE PICTURES AND VIDEOS	AUTO FOCUS MOTORIZED ZOOM	MOTORIZED LIGHT CONTROL
------------------------------	--------------------------------------------	---------------------------------	----------------------------

- Auto focus camera
- Take pictures and videos
- Built-in measuring software
- Automatic exposure and white balance
- Brightness, contrast ratio, gain are adjustable
- Display actual magnification
- Digital magnification
- Shortcut keyboard operation
- Display cross hair and gridline  
(blue/green/red/yellow/black/white colors)



## SPECIFICATION

Magnification	27.4X~163X
Sensor	1/2.8" CMOS
Pixel	2M
Measuring accuracy	±0.02mm
Resolution	1920×1080
Frame rate	50/60fps
Output	HDMI
Power supply	power adapter
Dimension (L×W×H)	600×280×390mm
Net weight	6.5kg

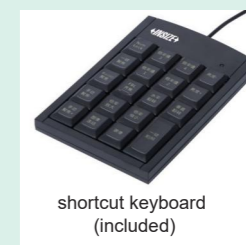
## STANDARD DELIVERY

Main unit (with stand)	1 pc
21.5" LCD	1 pc
16G USB flash disk	1 pc
Mouse	1 pc
HDMI cable	1 pc
Calibration plate	1 pc
White/black plate	1 pc
Shortcut keyboard	1 pc
Power adapter	2 pcs

## FOCUS DISTANCE AND VIEW FIELD

Optical magnification*	0.8X	1X	2X
Focus distance	88~133mm	88~133mm	98~123mm
View field (mm)	19.4×11~15.8×8.8mm	15×8.3~12.7×7.2mm	7.1×4~6.7×3.8mm
Optical magnification*	3X	4X	4.76X
Focus distance	103~115mm	108~111mm	108~111mm
View field (mm)	4.8×2.7~4.5×2.5mm	3.6×2~3.3×1.8mm	3×1.7~2.8×1.6mm

\*The optical zoom lens can be arbitrarily zoomed between 0.8X and 4.76X

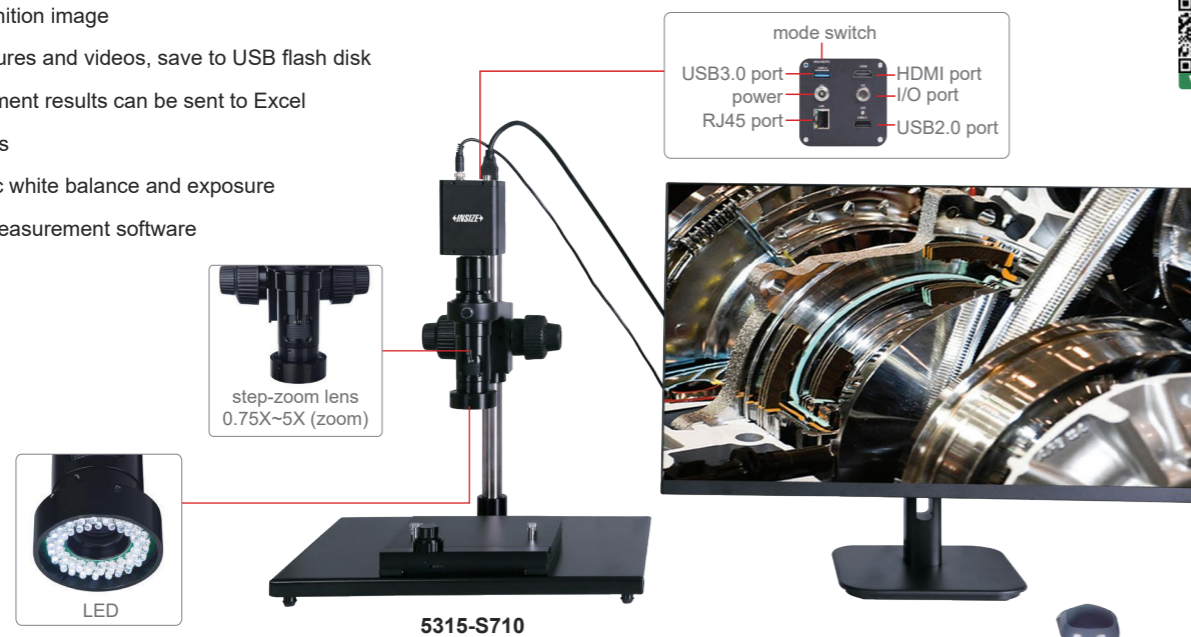


shortcut keyboard  
(included)

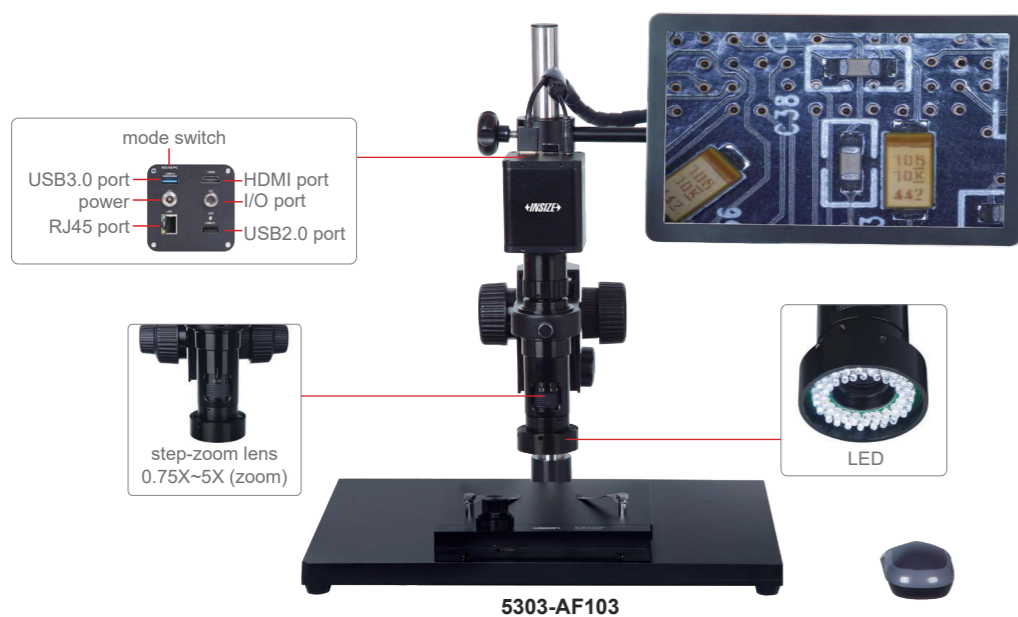
## AUTO FOCUS DIGITAL MICROSCOPES

AUTO FOCUS TAKE PICTURES AND VIDEOS MEASUREMENT

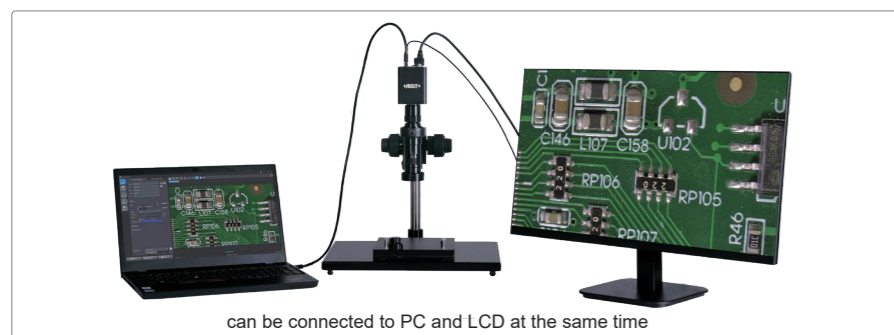
- High-definition image
- Take pictures and videos, save to USB flash disk
- Measurement results can be sent to Excel
- Auto focus
- Automatic white balance and exposure
- Built-in measurement software



5315-S710



5303-AF103



can be connected to PC and LCD at the same time



To be continued

Continued from previous page

## SPECIFICATION

Code	5315-S710	5303-AF103
Magnification	28X~185X (27" LCD)	20X~123X (13.3" LCD)
Sensor	1/1.7" CMOS	1/2.8" CMOS
Pixel	12M	2M
Resolution	4000×3000	1920×1080
Frame rate	30fps	60fps
Output	HDMI/USB/LAN	HDMI/USB/LAN
Power supply	power adapter	power adapter
Dimension (L×W×H)	570×300×430mm	570×300×430mm
Net weight	15kg	6.5kg

## STANDARD DELIVERY

Main unit	1 pc
LCD	1 pc
0.5X camera adapter	1 pc
1X auxiliary objective	1 pc
Calibration plate	1 pc
16G USB flash drive	1 pc
Mouse	1 pc
X-Y metal stage	1 pc
HDMI	2 pcs

## MAGNIFICATION, FOCUS DISTANCE AND VIEW FIELD

Code	Specification	Camera adapter	
		0.5X (included)	1X (optional)
5303-AF103	magnification	20~123X	40~246X
	focus distance	48~84mm	48~84mm
	view field	13×7~2.2×1mm	6.5×3.5~1.1×0.5mm
	measuring accuracy	±0.02mm	±0.02mm
5315-S710	magnification	28~185X	56~370X
	focus distance	73±2mm	73±2mm
	view field	18.2×11.0~3.2×1.9mm	8.6×5.5~1.6×0.9mm
	measuring accuracy	±0.02mm	±0.02mm

## OPTIONAL ACCESSORY

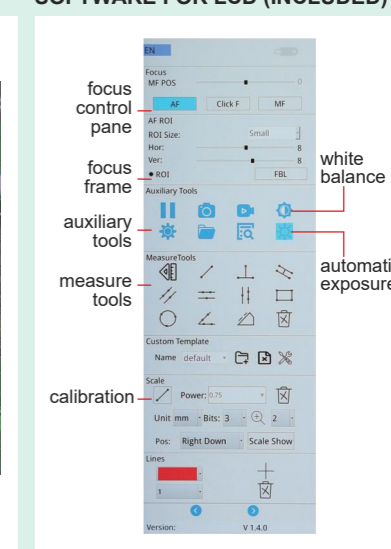
1X camera adapter	ISM-DL-CA1X
2X auxiliary objective	ISM-DL-OB2X
Computer	ISM-DL-COMPUTER



## SOFTWARE FOR COMPUTER (INCLUDED)



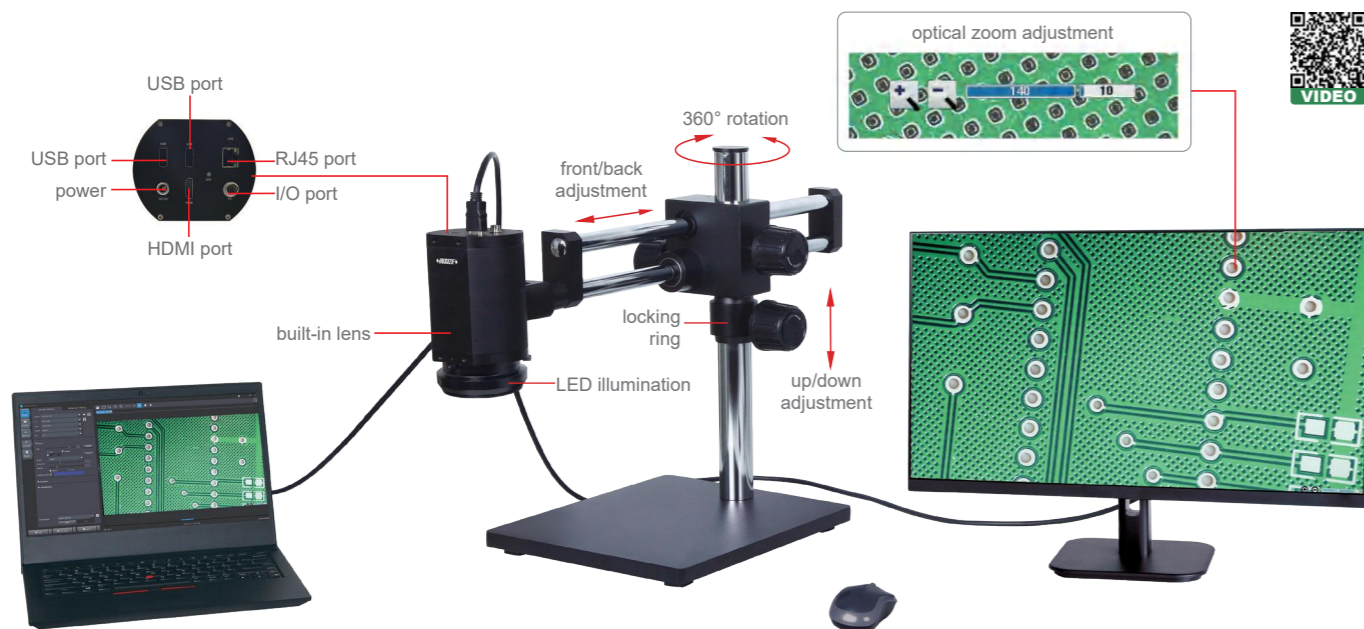
## SOFTWARE FOR LCD (INCLUDED)



## AUTO FOCUS DIGITAL MICROSCOPES (LARGE VIEW FIELD)

AUTO FOCUS

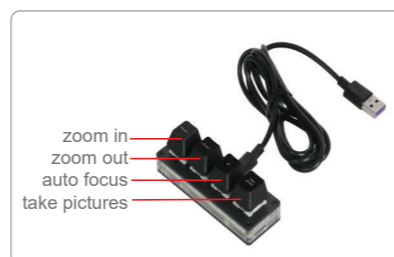
MEASUREMENT

TAKE PICTURES  
AND VIDEOSCAN BE CONNECTED TO PC  
AND TV AT THE SAME TIME

5302-AF105

connect to computer through cable to save pictures (software for computer is included)

- Auto focus camera
- Take pictures and videos
- Can be connected to TV (HDMI port) and computer (RJ45 port) at the same time
- Built-in measuring software for TV
- Measuring software for computers is included
- Automatic exposure and white balance
- Brightness, contrast ratio, gain are adjustable
- Display cross hair (blue/green/red/yellow/black/brown colors)



controller (optional, for TV)

### SPECIFICATION

Code	5302-AF105 (standard type)	5302-AF108 (high-definition type)
Pixel	2M	8M
Resolution	1920×1080	3840×2160
Magnification	1.6X~22.2X (27" TV)	1.6X~44.4X (27" TV)
Sensor	1/2.8" CMOS	
Auto focus distance	100mm~∞	
Output	HDMI, RJ45	
Frame rate	HDMI: 60fps, RJ45: 50fps	
Power supply	power adapter	
Dimension (L×W×H)	500×280×410mm	
Net weight	17kg	

To be continued

Continued from previous page

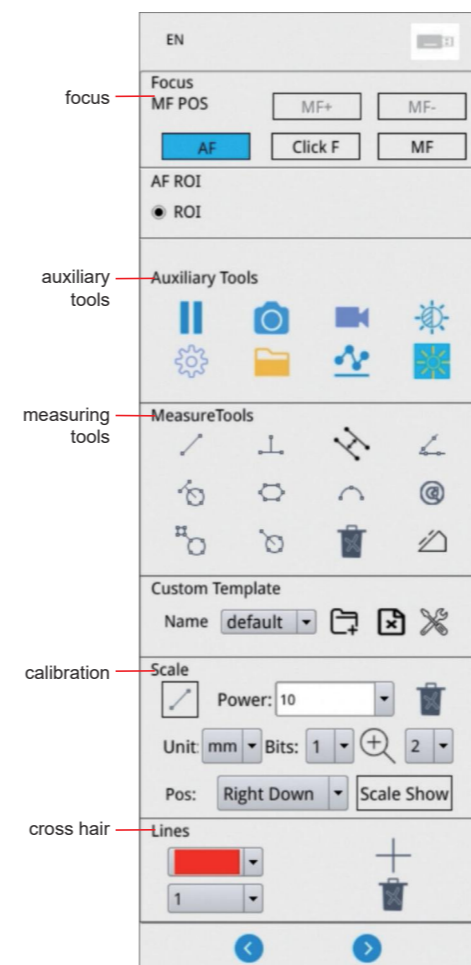
### MEASURING ACCURACY

Optical magnification (5302-AF105)	Optical magnification (5302-AF108)	Measuring accuracy
2X	2X	±0.1mm
4X	4X	±0.1mm
6X	6X	±0.04mm
8X	8X	±0.02mm
14X	14X	±0.02mm
/	28X	±0.02mm

### VIEW FIELD

Focus distance	Adjustable magnification (on 27" TV)	View field
100mm	3.3~22.2X	26×14~170×102mm
150mm	2.3~17.8X	33×18~230×142mm
200mm	1.9~15.5X	38×21~290×180mm
250mm	1.6~13.5X	43×24~350×216mm

### TV SOFTWARE (INCLUDED)



### STANDARD DELIVERY

Main unit (with stand)	1 pc
LED illumination	1 pc
16G USB flash disk	1 pc
Mouse	1 pc
HDMI cable (for TV)	1 pc
Network cable (for computer)	1 pc
Switch	1 pc
Software for computer	1 pc
Power adapter	2 pcs

### OPTIONAL ACCESSORY

Controller	5302-AF-CONTROLLER
------------	--------------------

## HIGH-DEFINITION AUTO FOCUS DIGITAL MICROSCOPE (LARGE VIEW FIELD)

CODE 5320-AF410

AUTO FOCUS DXF IMPORT AUTOMATIC MEASUREMENT  
FOCUS STACKING

the direction and on/off of each bulb can be independently controlled

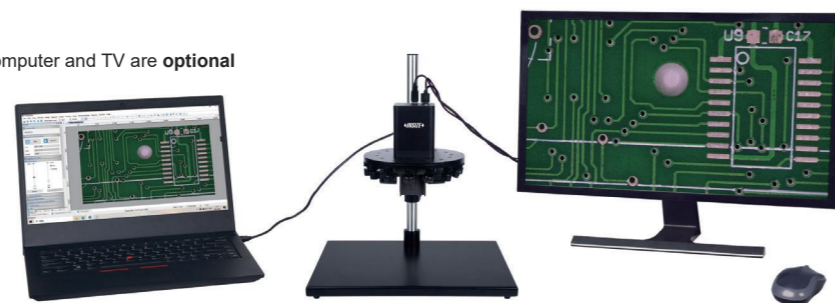


LED



- Auto focus camera
- Take pictures and videos
- Built-in measuring software
- Automatic exposure, sharpening, denoising and white balance
- 4K/1080P automatically switched by display resolution
- Display actual magnification
- Digital magnification
- Motorized light control
- Display cross hair and gridline

computer and TV are optional



can be connected to PC and TV at the same time

### SPECIFICATION

Magnification (on 28" TV)	2.4X~43.7X
View field	14.2×8~255×145mm
Auto focus distance	205~255mm
Sensor	1/2.8" CMOS
Pixel	8M
Resolution	3840×2160
Frame rate	60fps
Output	HDMI/USB/LAN
Power supply	power adapter
Dimension (L×W×H)	400×300×450mm
Net weight	5.8kg

### STANDARD DELIVERY

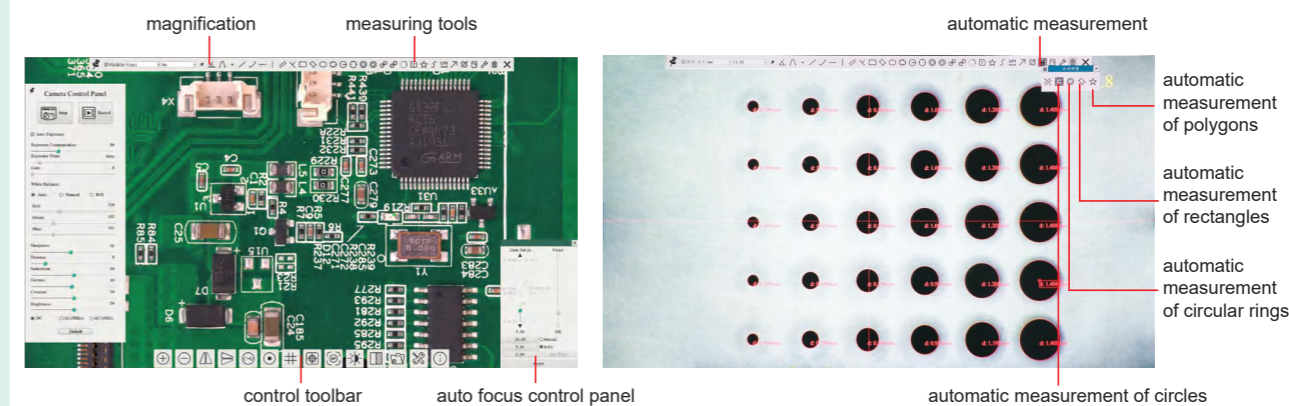
Main unit (with stand)	1 pc
LED illumination	1 pc
32G memory card and holder	1 pc
Mouse	1 pc
HDMI cable	1 pc
USB 3.0 cable	1 pc
Power adapter	1 pc

### MEASURING ACCURACY (ON 28" TV)

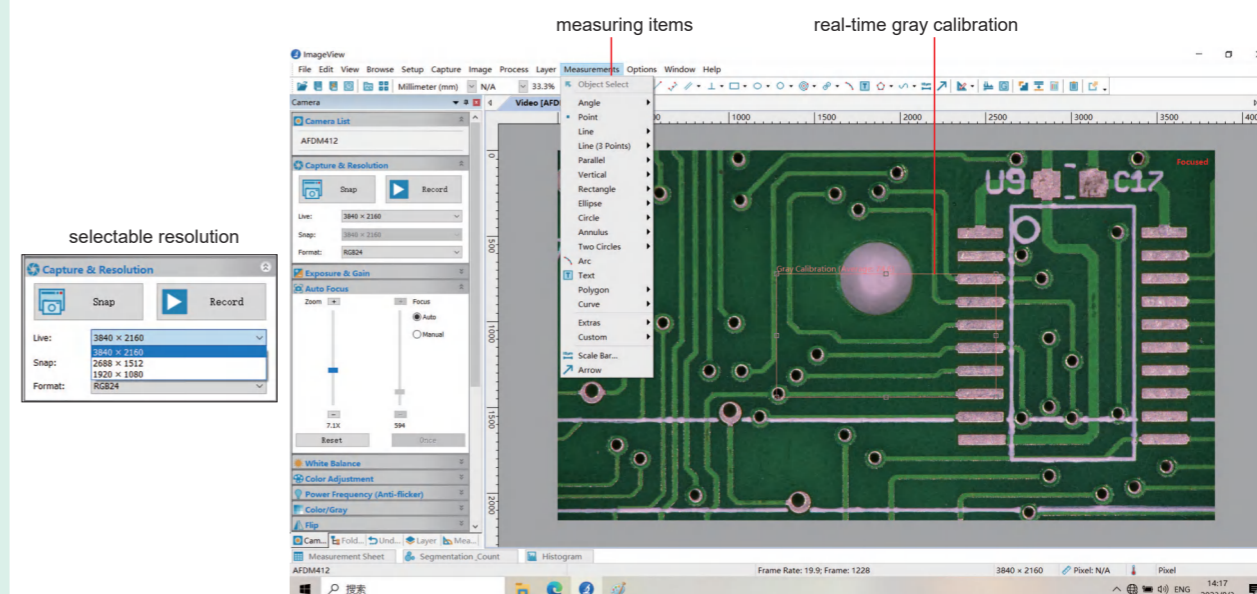
Optical magnification	Measuring accuracy
2X	±0.1mm
4X	±0.1mm
6X	±0.04mm
10X	±0.02mm
14X	±0.02mm
18X	±0.01mm

Continued from previous page

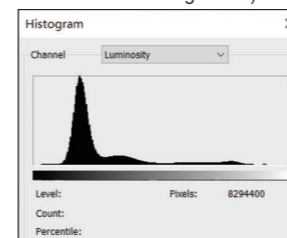
### SOFTWARE FOR TV (INCLUDED)



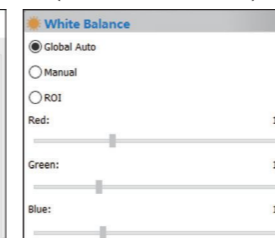
### PROFESSIONAL SOFTWARE (INCLUDED, FOR COMPUTER)



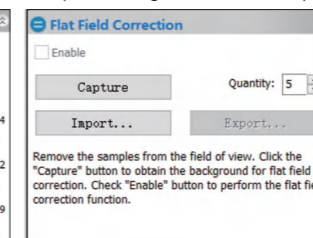
histogram  
(quantify the distribution of color and brightness)



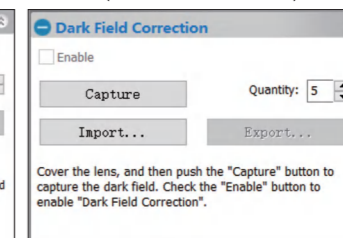
white balance  
(reduce color difference)



flat field balance  
(reduce brightness difference)



dark field balance  
(reduce thermal noise)



the software can control image completely, including measurement, image stitching, image gray processing, RGB histogram observation, image color sampling, 3D plot (3D representation of image intensity), image exposure, white balance, image bit depth, flat field correction and dark field correction, etc.

## FLEXIBLE ARM AUTO FOCUS DIGITAL MICROSCOPES

AUTO FOCUS IMAGE TRANSMISSION FOCUS STACKING IMAGE STICHING

- 1080P high-definition image
- Auto focus camera
- Take pictures and videos, saved to USB flash disk
- Picture review, picture compare
- Automatic exposure and white balance
- Brightness, contrast ratio, gain are adjustable
- Display cross hair  
(blue/green/red/yellow/black/brown colors)
- Built-in software without computer, operation by mouse
- Flexible arm
- Can switch between monitor mode and computer mode



Continued from previous page

### SPECIFICATION

Code	5317-AF109 (with magnetic stand)	5317-AF110 (with desktop clamp)
Magnification	20X~123X	
Sensor	1/2.8" CMOS	
Pixel	2M	
Resolution	1920×1080	
Frame rate	60fps	
Power supply	power adapter	
Dimension (height)	480mm	600mm
Net weight	5.6kg	8.5kg

### STANDARD DELIVERY

Main unit	1 pc
0.5X camera adapter	1 pc
1X auxiliary objective	1 pc
Calibration plate	1 pc
16G USB flash disk	1 pc
White/black plate	1 pc
Mouse	1 pc
HDMI cable	1 pc
Power adapter	2 pcs

### MAGNIFICATION, FOCUS DISTANCE AND VIEW FIELD

Auxiliary objective	Specification	Camera adapter	
		0.5X (included)	1X (included)
1X (included)	magnification	20~123X	40~246X
	focus distance	48~84mm	48~84mm
	view field	13×7~2.2×1mm	6.5×3.5~1.1×0.5mm
	measuring accuracy	±0.02mm	±0.02mm
2X (optional)	magnification	40~246X	80~492X
	focus distance	24~42mm	24~42mm
	view field	6.5×3.5~1.1×0.5mm	3.3×1.8~0.6×0.3mm
	measuring accuracy	±0.02mm	±0.02mm

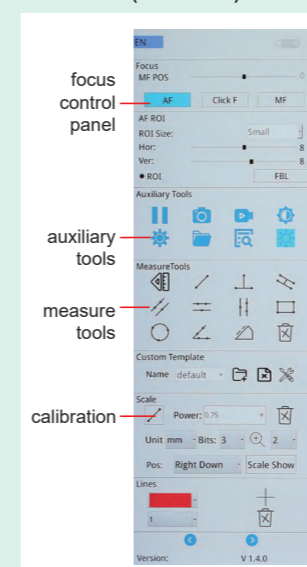
### AUTO FOCUS DISTANCE

Zoom objective scale	0.75X	1X	1.5X	2X	2.5X
Auto focus distance	48~84mm	50~78mm	55~73mm	62~71mm	65~70mm
Zoom objective scale	3X	3.5X	4X	4.5X	5X
Auto focus distance	66~70mm	67~70mm	68~70mm	68~70mm	68~70mm

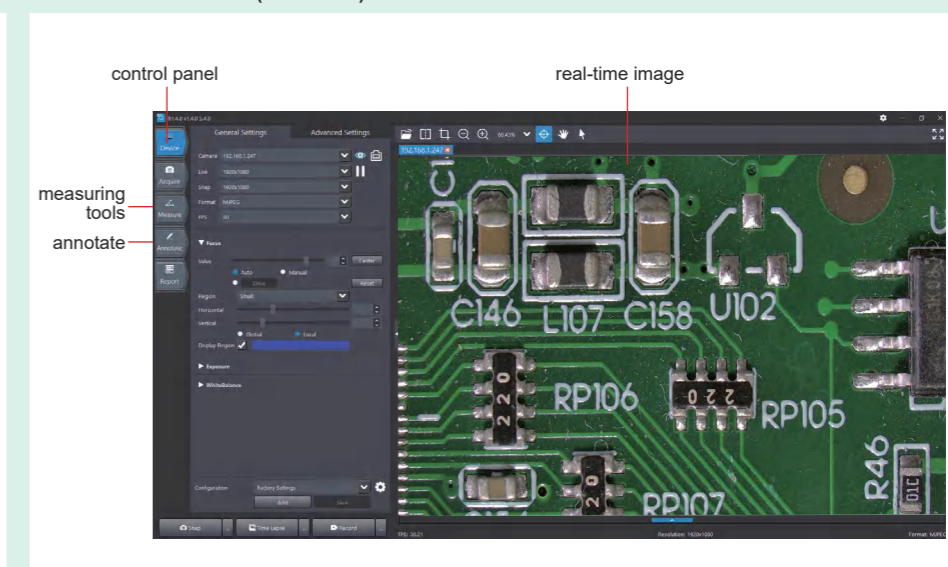
### OPTIONAL ACCESSORY

1X camera adapter	ISM-DL-CA1X
2X auxiliary objective	ISM-DL-OB2X

### SOFTWARE (INCLUDED)



### MEASURING SOFTWARE(INCLUDED)



To be continued

04

3D ROTATING MICROSCOPES

3D Rotating Microscope supports 360° sample rotation or orbital rotation of the objective lens. Breaking the limitation of a single viewing angle, it fully presents the three-dimensional structure of samples, and can clearly display the internal or side structures, assembly gaps, and complex curved surfaces of samples, making up for the viewing angle limitations of conventional microscopes.




3D Rotation



360° Rotation

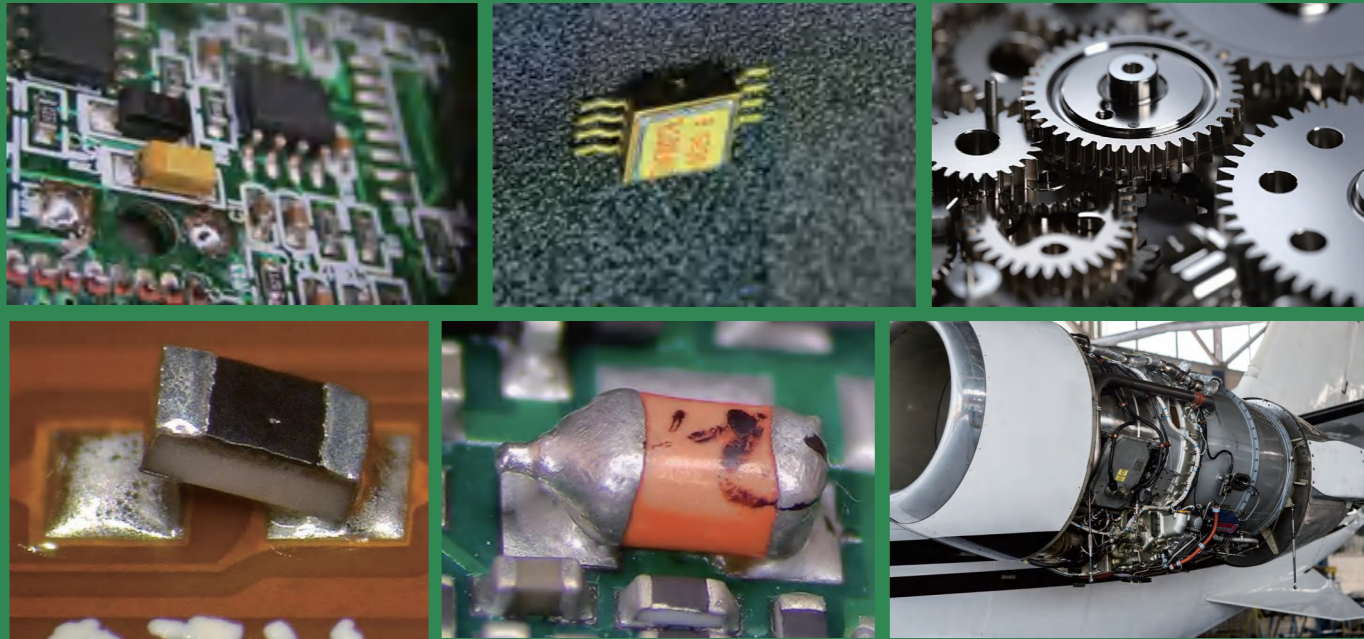


Microscope Function Selection Chart

Code	3D Rotation	Motorized Rotation	Motorized Light Control	2D/3D Switching	2D Measurement
 5301	✓	✓	✓		
 5313	✓				
 5327	✓	✓	✓	✓	✓
 5328	✓			✓	✓

Application Scenarios

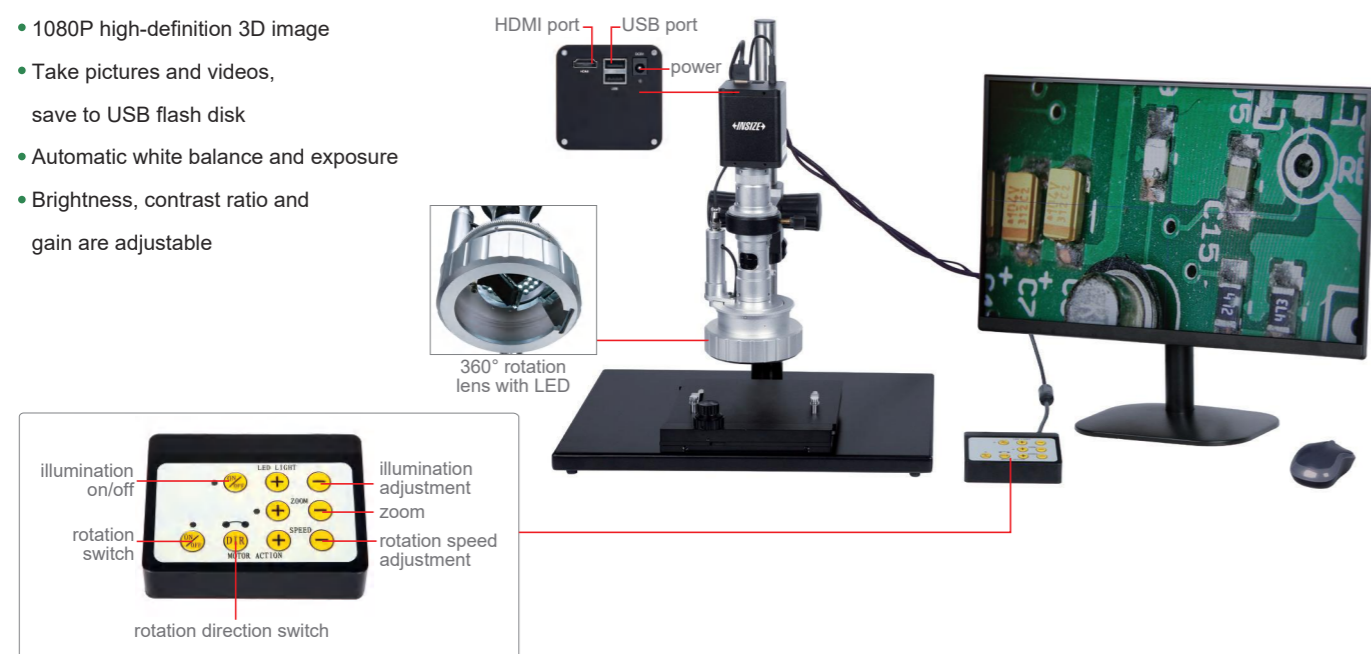
Full-angle observation of micro-gears, complex cavity molds, and micro-assemblies; 3D observation of chip packaging structures, micro-connectors, and multi-layer wiring on PCBs; 3D observation of micro-pores and complex curved surfaces of precision sensors, micro-bearings, and aerospace components.



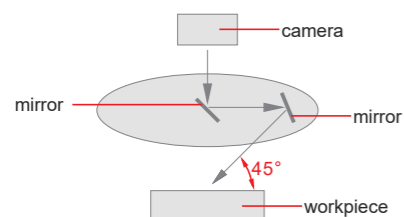
## MOTORIZED 3D ROTATION MICROSCOPE CODE 5301-D400

TAKE PICTURES  
AND VIDEOSSUITABLE TO CHECK CONVEX  
OBJECTS AND WALL OF HOLES

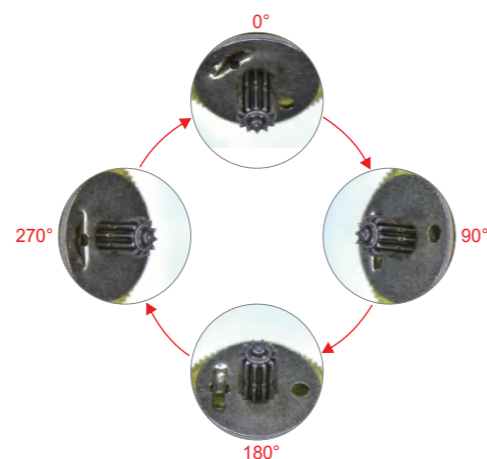
- 1080P high-definition 3D image
- Take pictures and videos, save to USB flash disk
- Automatic white balance and exposure
- Brightness, contrast ratio and gain are adjustable



working principle



360° rotation observation



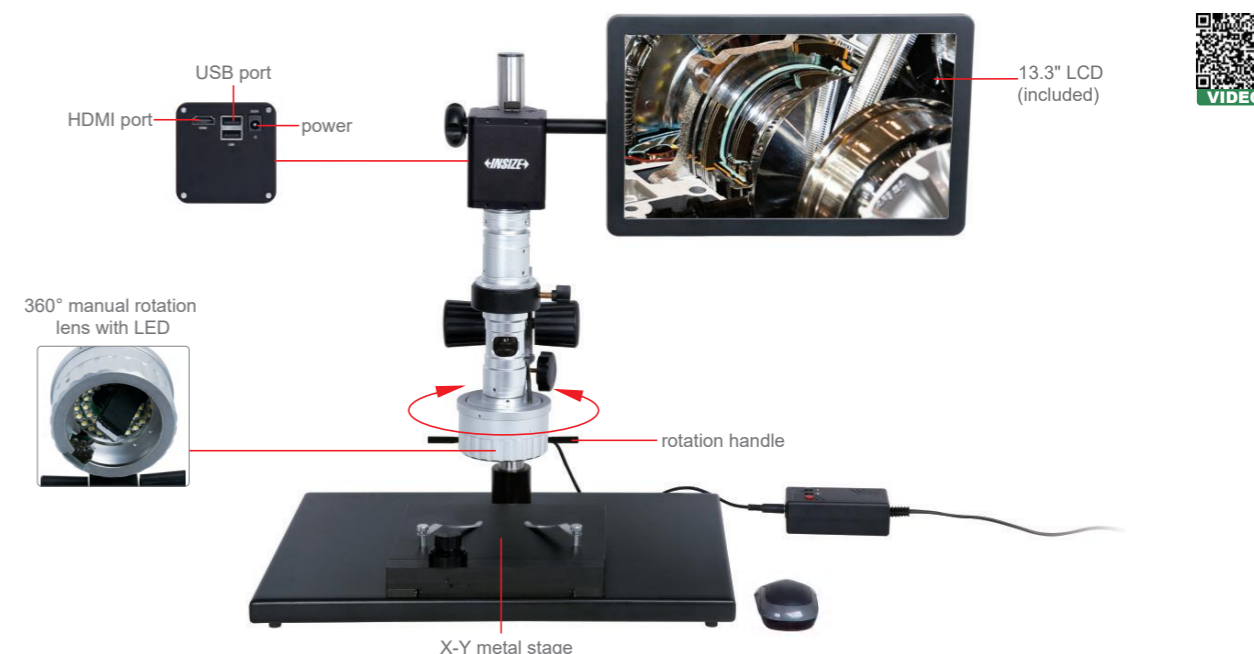
### SPECIFICATION

Magnification	15X~100X
View field	4.2×2.7~28×18mm
Focus distance	40mm
View angle	45°
Sensor	1/2.8" CMOS
Pixel	2M
Resolution	1920×1080
Frame rate	60fps
Output	HDMI
Rotation speed	2~4RPM
Power supply	220V, 50/60Hz
Dimension (L×W×H)	570×300×430mm
Net weight	10kg

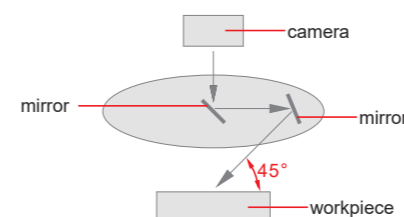
### STANDARD DELIVERY

Main unit	1 pc
Rotation controller	1 pc
X-Y metal stage	1 pc
16G USB flash disk	1 pc
White/black plate	1 pc
Mouse	1 pc
Power adapter	2 pcs

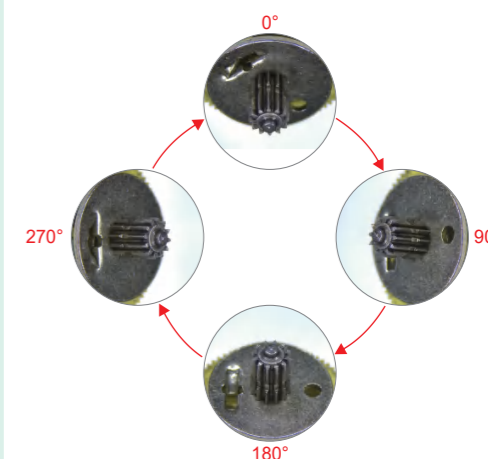
## MANUAL 3D ROTATION MICROSCOPE CODE 5313-S407

TAKE PICTURES  
AND VIDEOSSUITABLE TO CHECK CONVEX  
OBJECTS AND WALL OF HOLES

working principle



360° rotation observation



### SPECIFICATION

Magnification	18X~120X
View field	2.4×1.5mm~16×9mm
Focus distance	20mm
View angle	45°
Sensor	1/2.8" CMOS
Pixel	2M
Resolution	1920×1080
Frame rate	60fps
Output	HDMI
Power supply	power adapter
Dimension (L×W×H)	570×300×430mm
Net weight	10kg

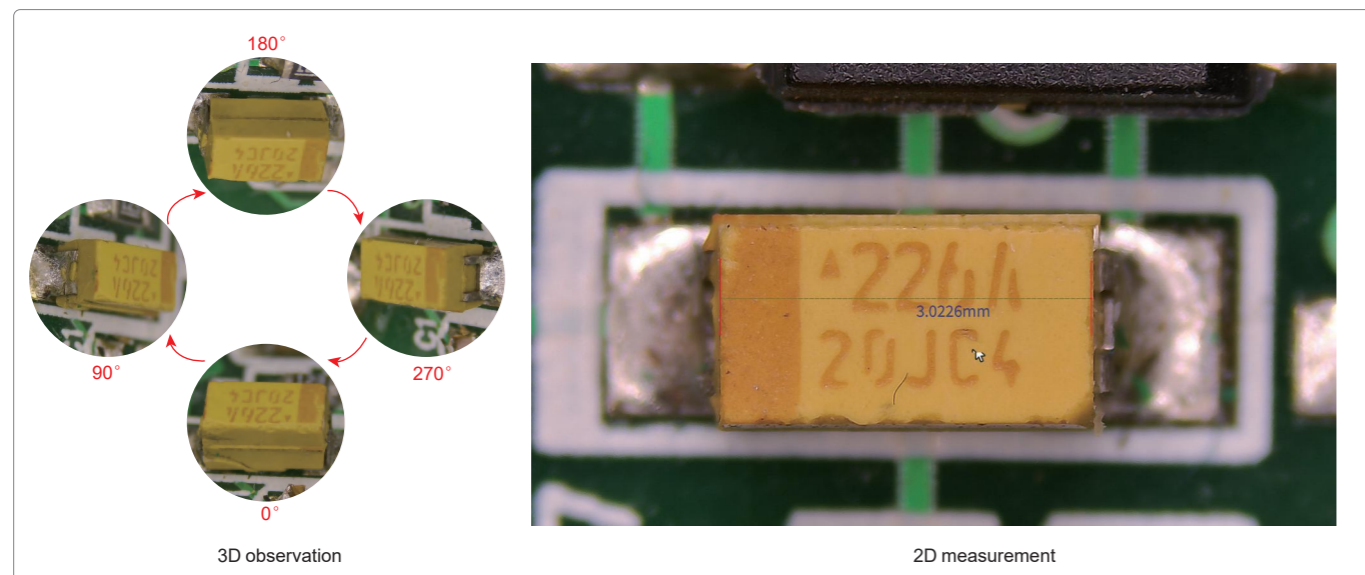
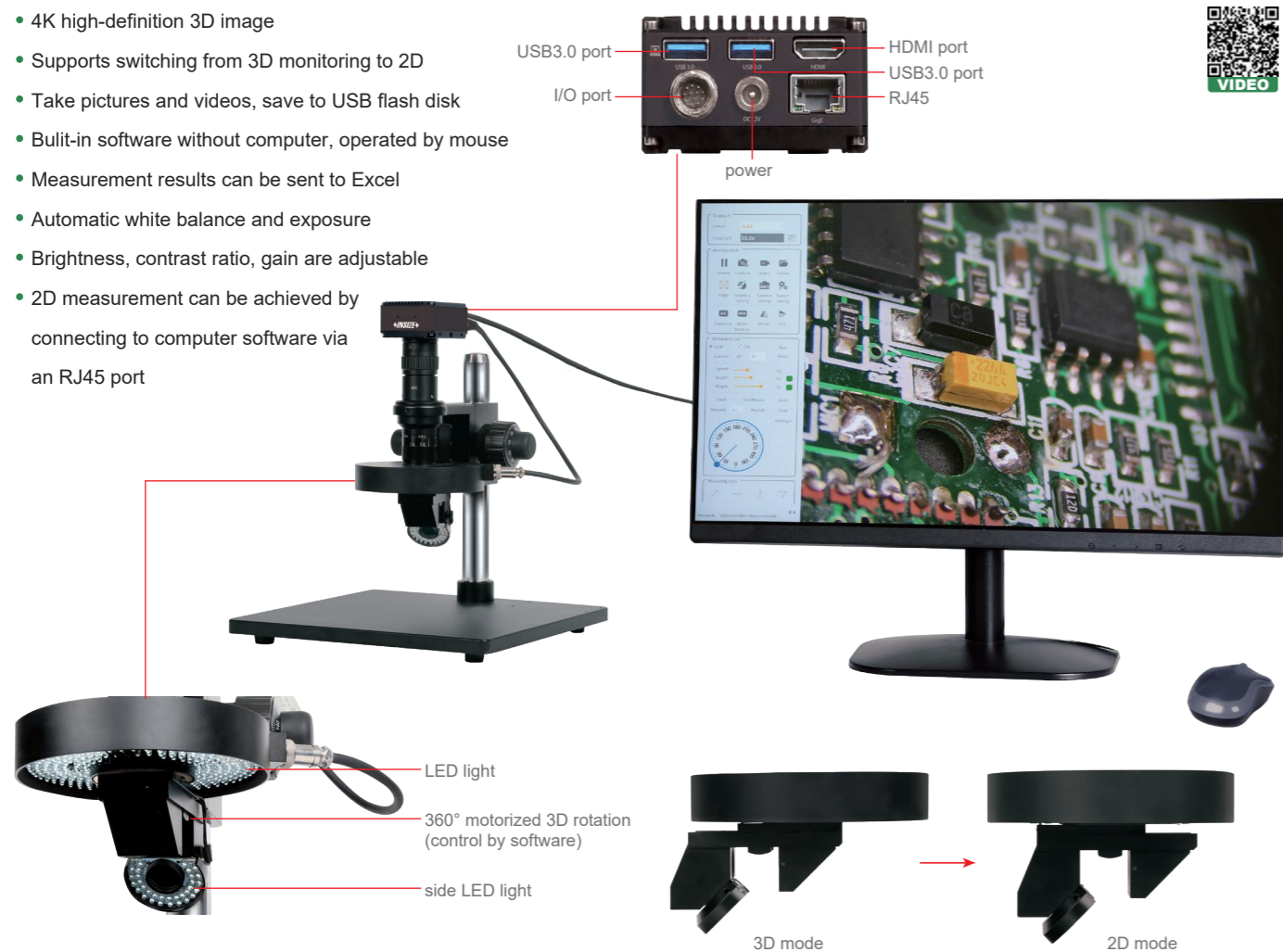
### STANDARD DELIVERY

Main unit	1 pc
X-Y metal stage	1 pc
16G USB flash disk	1 pc
White/black plate	1 pc
Mouse	1 pc
Power adapter	2 pcs

## 2D/MOTORIZED ROTATION 3D MICROSCOPE CODE 5327-MD10

MOTORIZED  
3D ROTATIONTAKE PICTURES  
AND VIDEOSSWITCHABLE  
BETWEEN 3D AND 2D

- 4K high-definition 3D image
- Supports switching from 3D monitoring to 2D
- Take pictures and videos, save to USB flash disk
- Built-in software without computer, operated by mouse
- Measurement results can be sent to Excel
- Automatic white balance and exposure
- Brightness, contrast ratio, gain are adjustable
- 2D measurement can be achieved by connecting to computer software via an RJ45 port



To be continued

Continued from previous page

### SPECIFICATION

Magnification	26X~206X
View field	24×20~3×2mm
Sensor	1/1.8" CMOS
Pixel	8M
Resolution	3840×2160
Single pixel size	2×2μm
Frame rate	60fps
Focus distance (2D)	86mm
Focus distance (3D)	50mm
Output	HDMI
Power supply	power adapter
Dimension (L×W×H)	330×300×318mm
Net weight	7.8kg

### 2D MAGNIFICATION, VIEW FIELD AND MEASURING ACCURACY

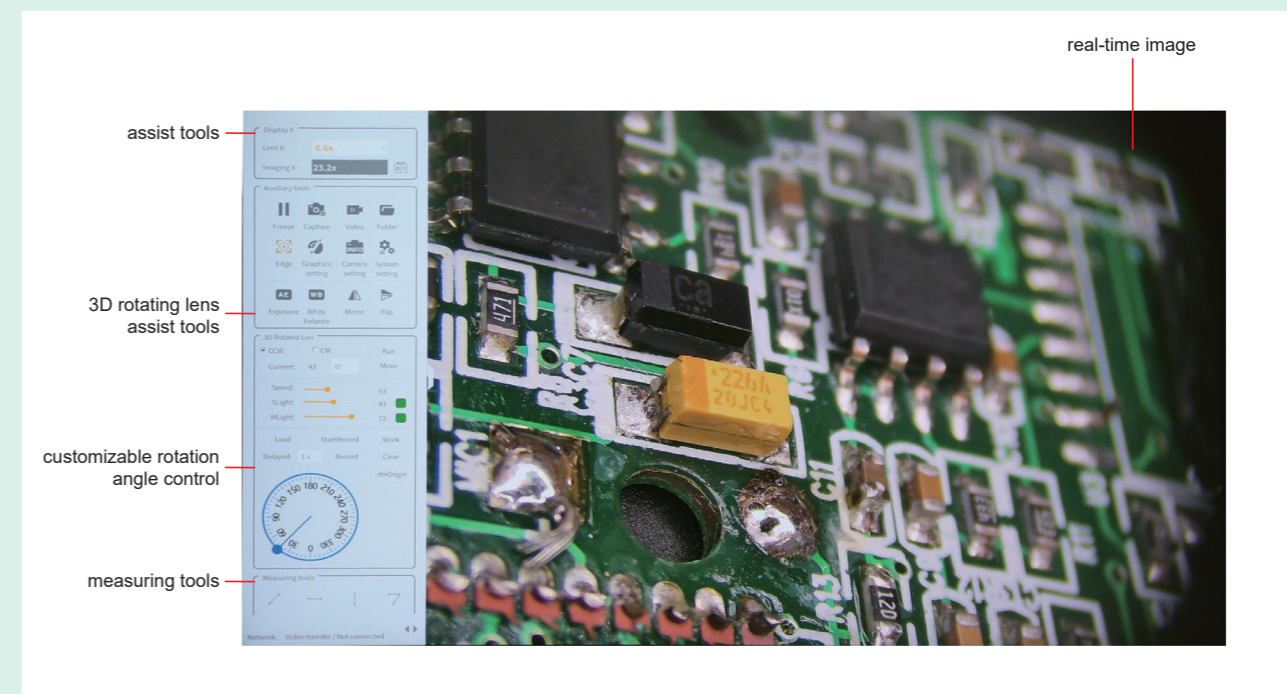
Objective magnification	Image magnification	View field	Measuring accuracy
0.6X	26X	23×13mm	±5μm
0.8X	34X	17×10mm	±5μm
1X	42X	14×8mm	±5μm
1.5X	62X	9×5mm	±5μm
2X	83X	7×4mm	±5μm
2.5X	103X	5.5×3mm	±4μm
3X	123X	4.5×2.5mm	±4μm
3.5X	144X	4×2mm	±4μm
4X	165X	3.5×2mm	±3μm
4.5X	185X	3×1.5mm	±3μm
5X	206X	2.5×1.5mm	±3μm

### STANDARD DELIVERY

Main unit (with stand)	1 pc
0.5X camera adapter	1 pc
1X auxiliary objective	1 pc
16G USB flash disk	1 pc
White/black plate	1 pc

Mouse	1 pc
LCD (27")	1 pc
Calibration plate	1 pc
Power adapter	1 pc

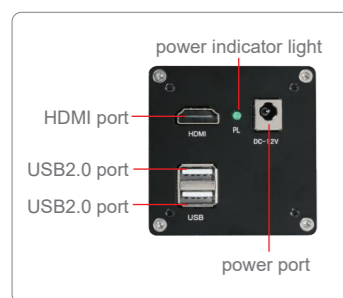
### SOFTWARE (INCLUDED)



## 2D/MANUAL ROTATION 3D MICROSCOPE CODE 5328-ML10

MANUAL 3D  
ROTATIONTAKE PICTURES  
AND VIDEOSSWITCHABLE BETWEEN  
3D AND 2D

- Switchable between 3D monitoring and 2D measurement
- Take pictures and videos, save to USB flash disk
- Built-in software without computer, operated by mouse
- Measurement results can be sent to Excel
- Automatic white balance and exposure
- Brightness, contrast ratio, gain are adjustable



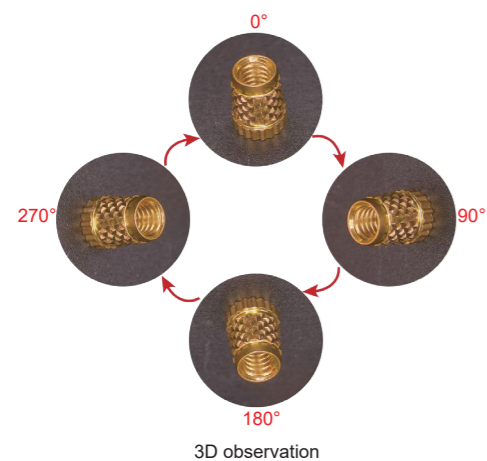
0.5X camera adapter

step-zoom lens  
0.6X ~ 5X (zoom)independent 4-zone  
light control

3D mode



2D mode



3D observation



2D measurement

To be continued

Continued from previous page

### SPECIFICATION

Magnification	11X~94X
View field	30.6×17.2~3.6×2mm
Sensor	1/2" CMOS
Pixel	2M
Resolution	1920×1080
Single pixel size	2.4×2.4μm
Frame rate	60fps
Focus distance (2D)	86mm
Focus distance (3D)	50mm
Output	HDMI
Power supply	power adapter
Dimension (L×W×H)	330×300×318mm
Net weight	7.8kg

### 2D MAGNIFICATION, VIEW FIELD AND MEASURING ACCURACY

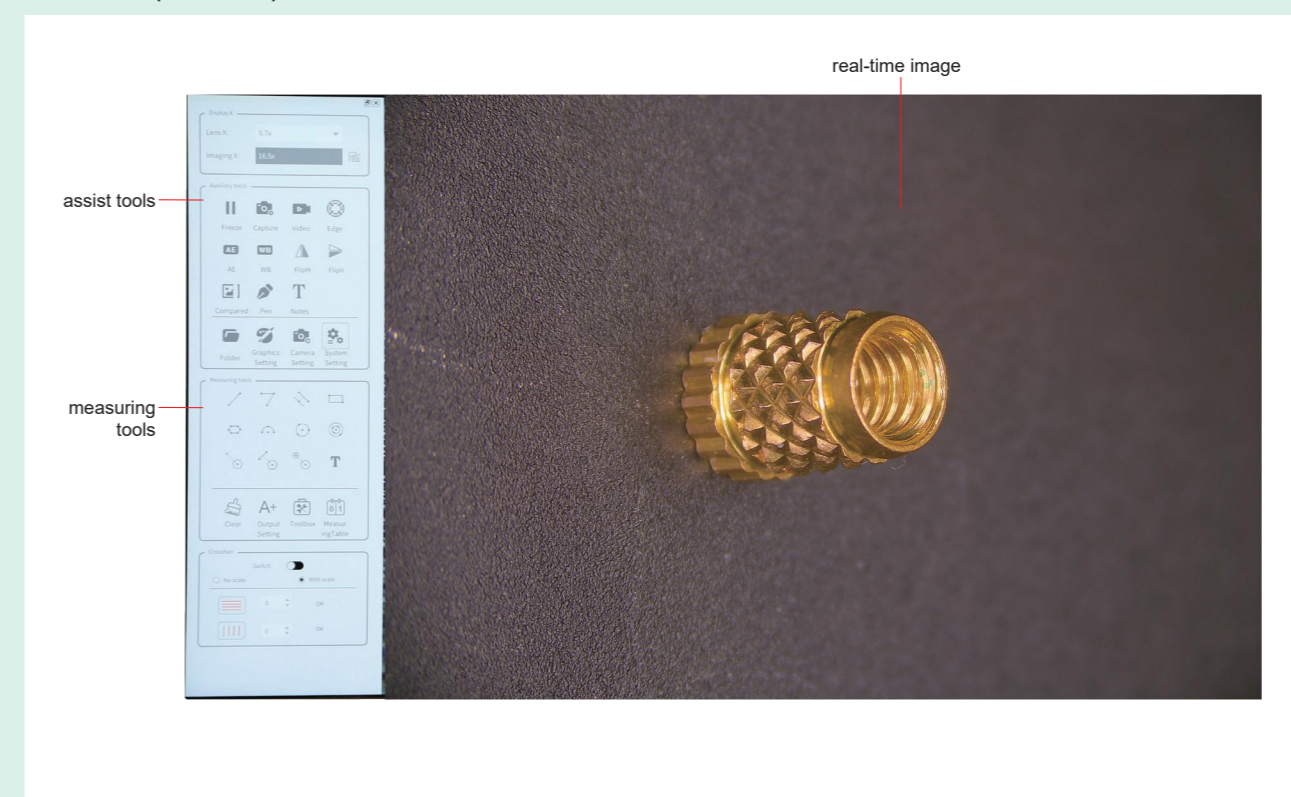
Objective magnification	Image magnification	View field	Measuring accuracy
0.6X	11X	30.6×17.2mm	±12μm
0.8X	14.5X	23.1×13mm	±11μm
1X	18.5X	18.4×10.3mm	±10μm
1.5X	27.5X	12.3×6.9mm	±9μm
2X	37X	9.1×5.1mm	±9μm
2.5X	46.5X	7.3×4.1mm	±9μm
3X	56X	6.1×3.4mm	±8μm
3.5X	66X	5.2×2.9mm	±8μm
4X	75X	4.5×2.5mm	±7μm
4.5X	84X	4×2.2mm	±7μm
5X	94X	3.6×2mm	±7μm

### STANDARD DELIVERY

Main unit (with stand)	1 pc
0.5X camera adapter	1 pc
1X auxiliary objective	1 pc
16G USB flash disk	1 pc
White/black plate	1 pc

Mouse	1 pc
LCD (13.3")	1 pc
Calibration plate	1 pc
Power adapter	1 pc

### SOFTWARE (INCLUDED)



# 05

## PORTABLE MINI MICROSCOPES

The portable microscope is compact and easy to carry, allowing for quick movement and on-site rapid observation. It features a small size and light weight, making it suitable for handheld operation or easy transportation. With simple operation and no need for complicated debugging, some models support wireless connection to mobile phones or computers, enabling real-time image transmission and data storage.






Compact and Portable



Data Transmission

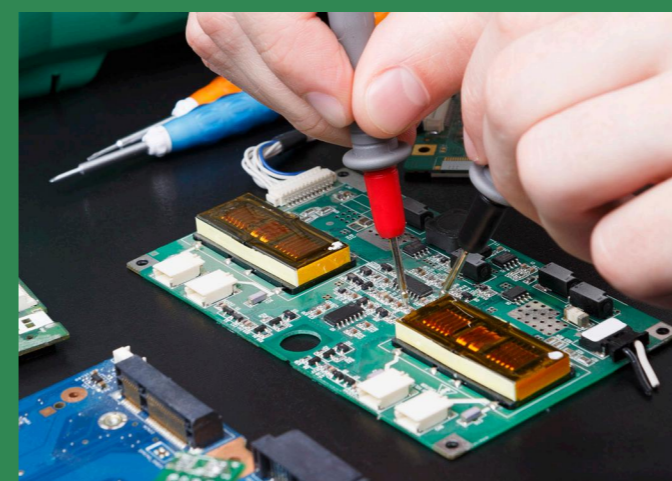
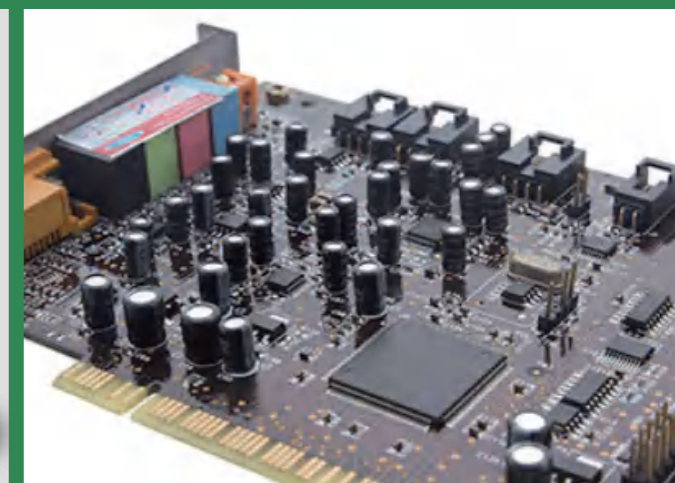


Microscope Function Selection Chart

Code	USB Communication	WIFI Communication	Supports Memory Cards (Max. 128GB)	Infrared Remote Control	Display (Included)	Stand (Included)
 ISM-PM200	✓					✓
 ISM-WF200	✓	✓				
 5311-MF710	✓		✓	✓	✓	✓

### Application Scenarios

Industrial on-site testing, outdoor measurement, electronic maintenance, quality inspection and patrol inspection, etc.



## DIGITAL MEASURING MICROSCOPES (ECONOMIC TYPE)

- Can take pictures and videos
- Supplied with software
- Calibration rulers (graduation 0.1 and 1mm) are included
- With focus support



universal stand (included in ISM-PM200SB)



filter (optional)



focus support (included)



To be continued

Continued from previous page

### SPECIFICATION

Code	ISM-PM200SA	ISM-PM200SB
Magnification	10X~200X	10X~200X
Stand	standard	universal
Pixel	2M (resolution: 1920×1080)	
Illumination	built-in adjustable LED	
Power supply	USB 2.0 cable (voltage required: 5±0.1V)	

### MAGNIFICATION, FOCUS DISTANCE, VIEW FIELD AND ACCURACY

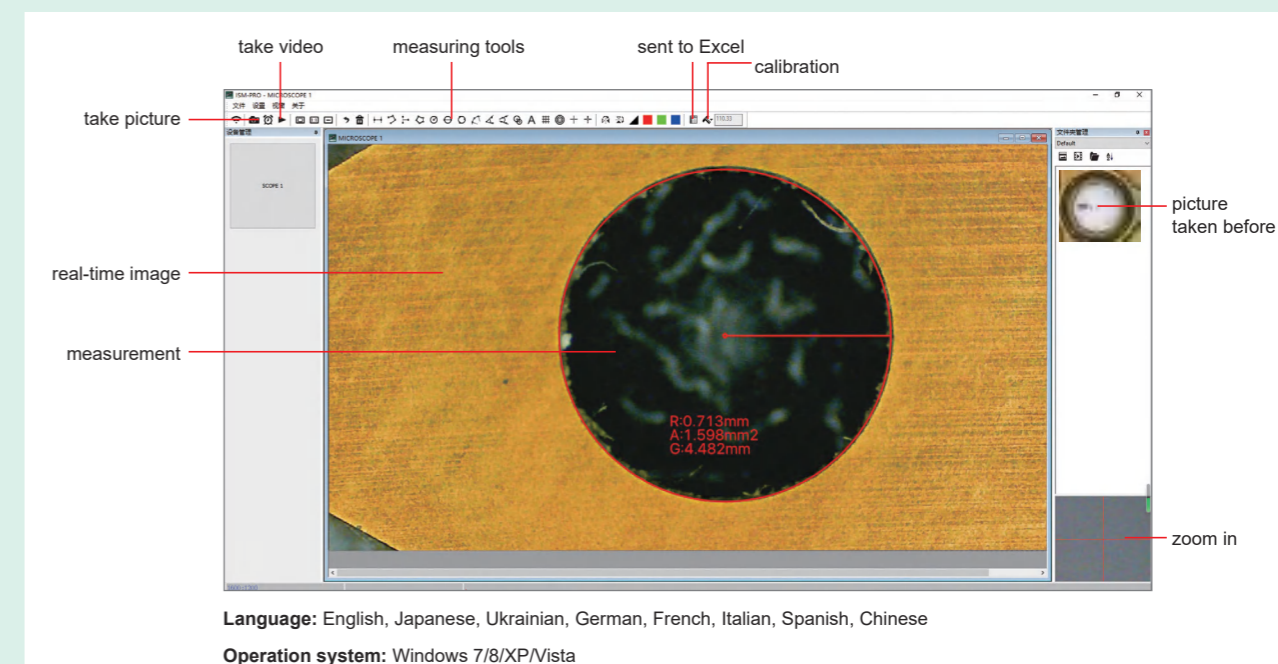
Magnification	Focus distance	View field	Accuracy
50X	22mm	9.6×7.1mm	30μm
100X	14mm	4.8×3.6mm	15μm
150X	14mm	3.3×2.5mm	10μm
200X	19mm	2.3×1.8mm	8μm

### STANDARD DELIVERY

Main unit	1 pc
USB flash disk	1 pc

### OPTIONAL ACCESSORY

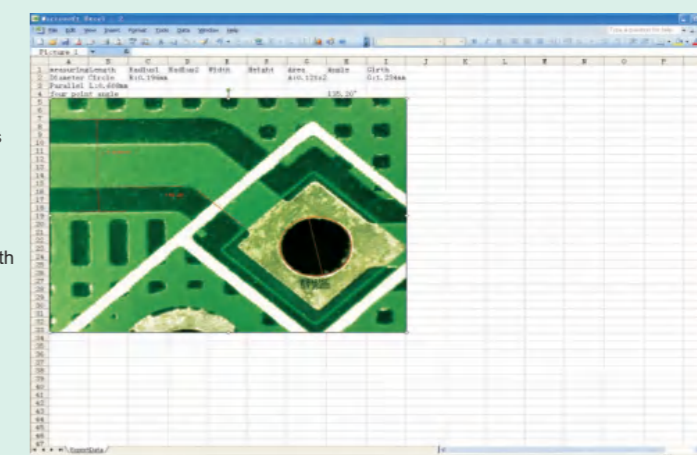
Green filter	SM-PM-GREEN
Yellow filter	ISM-PM-YELLOW
Blue filter	SM-PM-BLUE



### Measuring tools:

- |                                                                    |                                          |
|--------------------------------------------------------------------|------------------------------------------|
| measure distance between two parallel lines                        | measure angle with three points          |
| measure area of polygon                                            | measure distance between two circles     |
| measure radius, diameter, girth and area of circle with two points | measure length of continuous line        |
| measure radius of arc                                              | measure radius, girth and area of circle |
| measure distance between point and line                            | measure angle with two lines             |
| measure radius of circle                                           | add text                                 |

### Data is sent to Excel:



## WIFI DIGITAL MEASURING MICROSCOPE (ECONOMIC TYPE) CODE ISM-WF200

- Maximum working distance is 5m under WIFI mode
- Can be connected to multiple iPads, Android devices or computers together under WIFI mode
- Take pictures and videos
- Supplied with software



### SPECIFICATION

Magnification	10X~200X
Pixel	1.3M (resolution: 1280×1024)
Illumination	built-in adjustable LED
Power supply	built-in rechargeable battery

### MAGNIFICATION, FOCUS DISTANCE, VIEW FIELD AND ACCURACY

Magnification	Focus distance	View field	Accuracy
50X	21mm	8.1×6.4mm	30μm
100X	13mm	3.9×3.1mm	15μm
150X	16mm	2.6×2.1mm	10μm
200X	19mm	1.8×1.5mm	8μm

### STANDARD DELIVERY

Microscope	1 pc
Focus support ring for 80X/150X	1 pc
Focus support ring for 60X/200X	1 pc
Glass calibration ruler (graduation 0.1mm)	1 pc
Plastic calibration ruler (graduation 1mm)	1 pc
Software and USB cable	1 pc
AC/DC adapter	1 pc

### OPTIONAL ACCESSORY

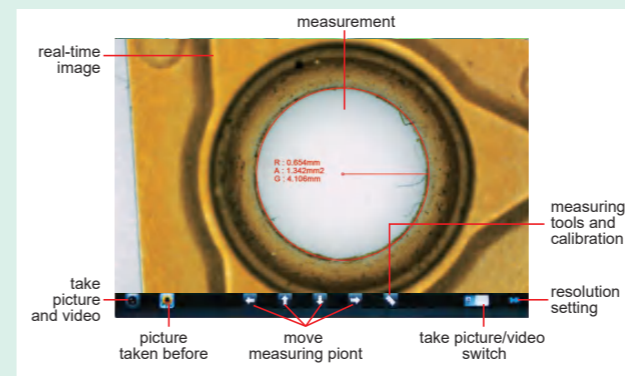
Stand	ISM-PM-STAND
Green filter	ISM-PM-GREEN
Yellow filter	ISM-PM-YELLOW
Blue filter	ISM-PM-BLUE

To be continued

Continued from previous page

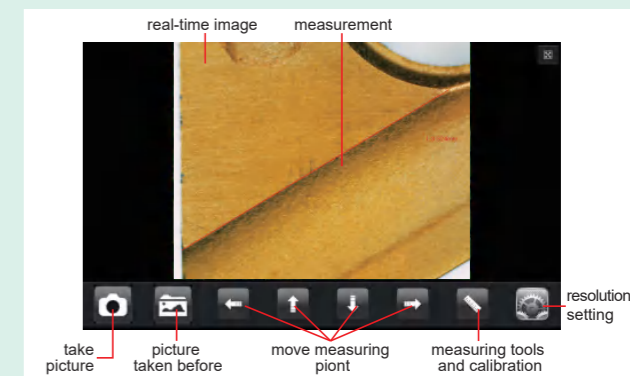
### 1 Software ISM-WF200 (for iPad by WIFI)

- measure length of line or distance between two points
- measure radius, girth and area of circle with three points
- measure angle



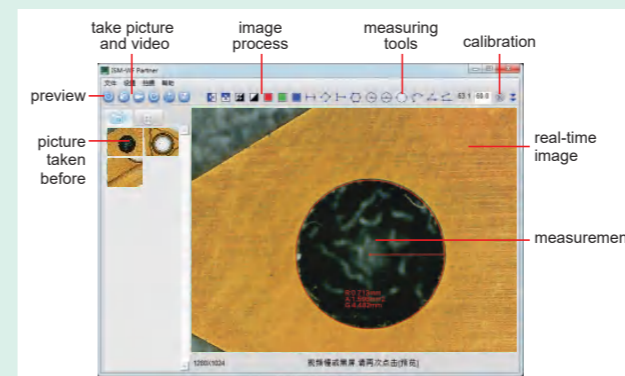
### 2 Software ISM-APK (for Android devices by WIFI)

- measure length of line or distance between two points
- measure radius, girth and area of circle with three points
- measure angle



### 3 Software ISM-WF Partner (for computer by WIFI)

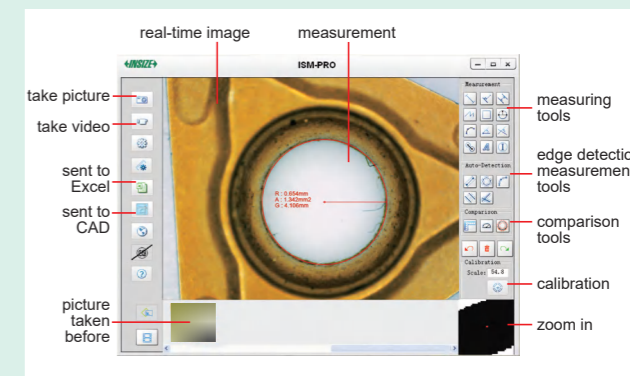
- measure length of line or distance between two points
- measure area of polygon
- measure angle with three points
- measure radius, girth and area of circle with center point
- measure length of continuous line
- measure radius, girth and area of circle with three points
- measure angle with two lines
- measure radius, girth and area of circle with two points
- measure distance between point and line
- measure radius, length and angle of arc
- measure area of rectangle



### 4 Software ISM-PRO (for computer by USB cable)

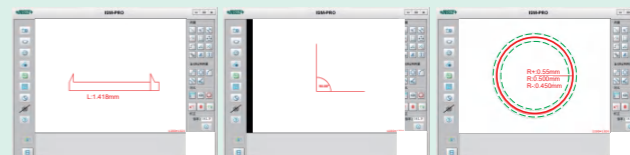
#### Measuring tools:

- measure length of line or distance between two points
- measure length of continuous line
- measure radius, length and angle of arc
- measure distance between two circles
- measure distance between two parallel lines
- measure angle with two lines
- measure distance between point and line
- measure area of rectangle
- measure angle with two lines
- add text
- measure radius, girth and area of circle
- add number with circle



#### Edge detection measurement tools:

- detect line automatically, and calculate length
- detect arc automatically, and calculate radius, angle and arc length
- detect circle automatically, and calculate radius, girth and area
- detect two parallel lines automatically and calculate distance
- detect two lines automatically, and calculate angle

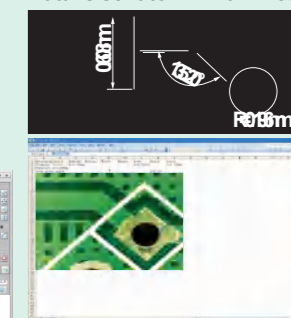


#### Comparison tools:

Create line, angle or circle with desired size, to compare with workpieces

- create line
- create angle
- create circle with tolerance

#### Data is sent to CAD or Excel:



## MINI DIGITAL MICROSCOPE (ECONOMIC TYPE)

### CODE 5311-M710

TAKE PICTURES  
AND VIDEOSBUILT-IN LITHIUM  
BATTERYinfrared ray remote  
controller (included)32G memory card  
and holder (included)

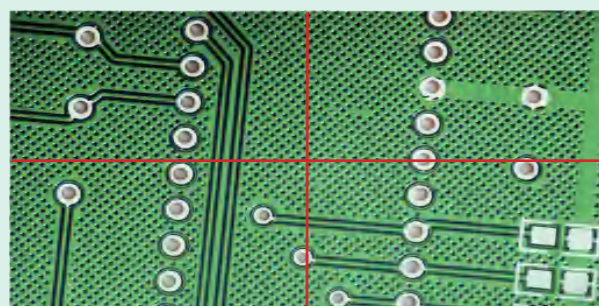
#### SPECIFICATION

Display resolution	1280×800
Sensor	1/3" CMOS
Pixel	13M
Single pixel size	1.12μm×1.12μm
Frame rate	60fps/30fps
Magnification	6.5X~60X
View field	3.6×2~33×18.5mm
White balance	auto/manual (10 levels RGB)/calibration
Exposure control	AE lock/exposure compensation (10 levels)
Image control	contrast/saturation/sharpness (10 levels)
Record media	memory card (128G Max)
Output	HDMI
Power supply	power adapter
Dimension (LxWxH)	180×200×360mm
Net weight	1.3kg

#### STANDARD DELIVERY

Main unit	1 pc
USB cable	1 pc
HDMI cable	1 pc
IR remote controller	1 pc
32G memory card and holder	1 pc
Plastic calibration ruler	1 pc
Power adapter	1 pc

computer is optional

connect to computer with USB cable,  
take pictures and videos, make measurement

cross hair



grid (color, line width and positions are adjustable)

Continued from previous page

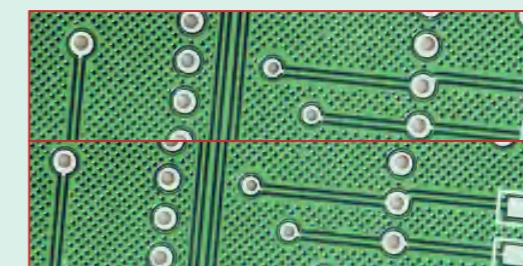
#### Screen freezing:

full screen



frozen screen

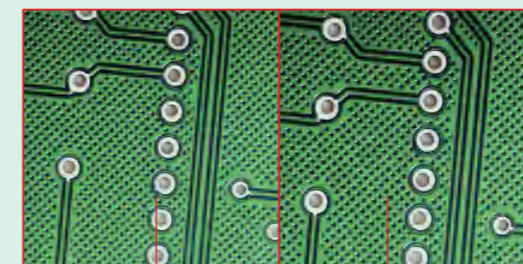
up-down split screen



frozen screen

real-time image

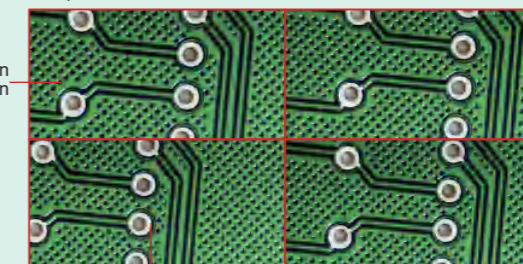
left-right split screen



frozen screen

real-time image

1/4 split screen



first frozen screen

second frozen screen

real-time image

third frozen screen

#### SOFTWARE FOR COMPUTER (INCLUDED)

Language: Chinese (Simplified), English

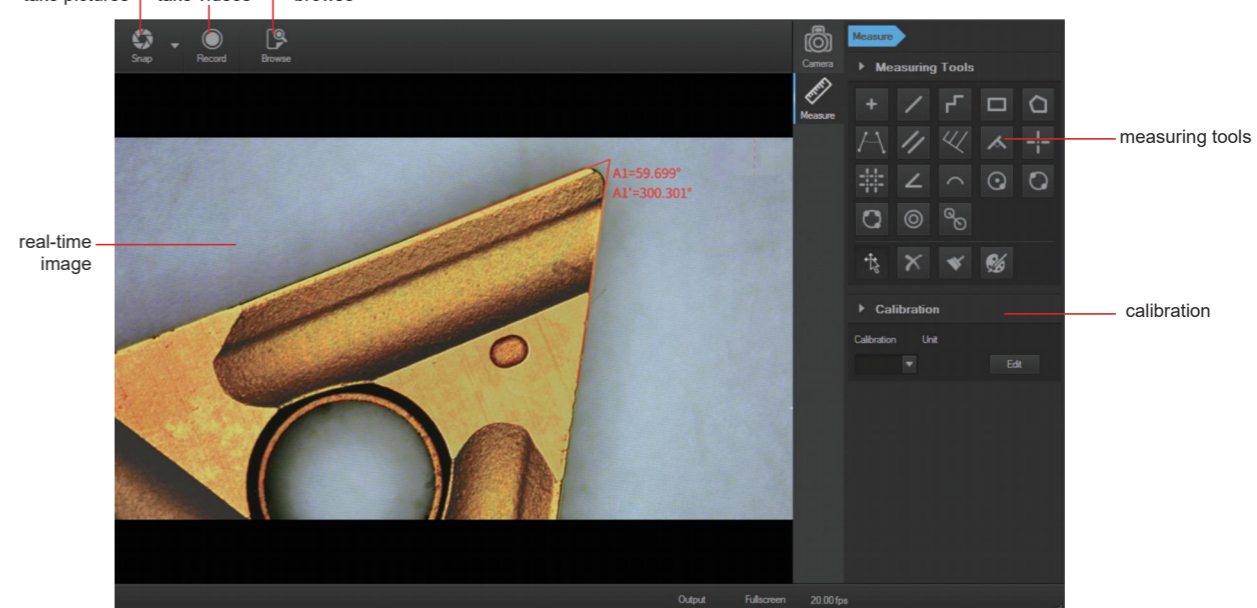
Operation system: Windows 7/8/8.1/10 (64bit)

Port: USB2.0 or above

Measuring accuracy: 0.02mm

+ point counting	straight line length	continuous line length	area of a rectangle
distance between parallel lines	double cross line	point-line distance	cross line
arc	radius of a circle	radius of a 2-point circle	radius of a 3-point circle
distance between 2 lines	angle	center distance of 2 circles	area of a polygon
center distance of concentric circle		distance between line and first parallel line	

take pictures take videos browse



To be continued

06

## SMART MICROSCOPE

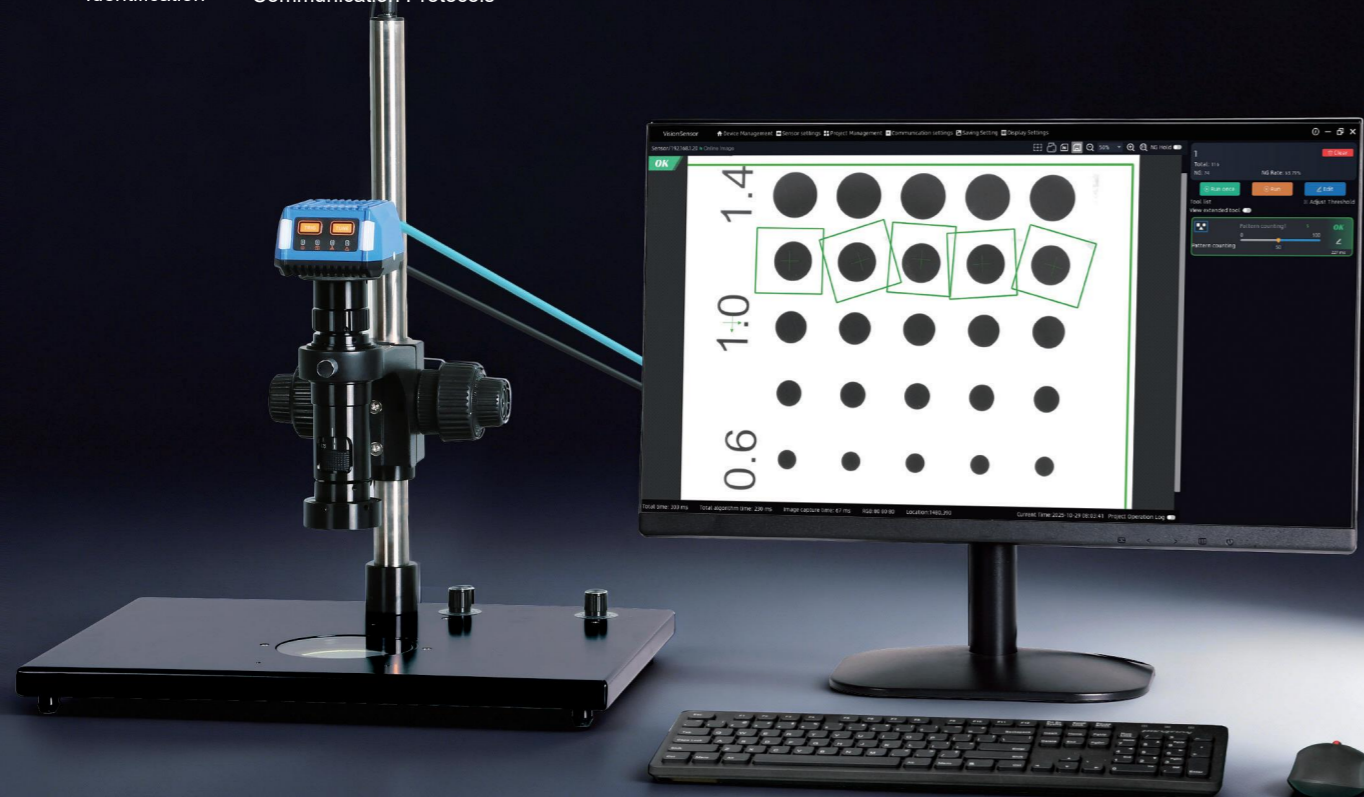
Visual inspection enables automatic identification of different workpieces, automatic correction of position and orientation, and eliminates the need for precise positioning. It supports multiple industrial communication protocols (TCP/IP, Modbus TCP, Modbus RTU, PROFINET, EtherNet/IP, MELSEC/SLMP, Serial). The system incorporates a variety of inspection tools that can be combined arbitrarily for flexible application in workpiece detection.



Automatic Identification



Supports Multiple Communication Protocols

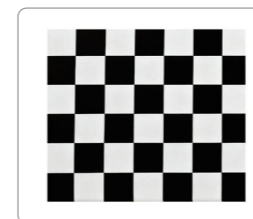


### SMART MICROSCOPE CODE ISM-DL402

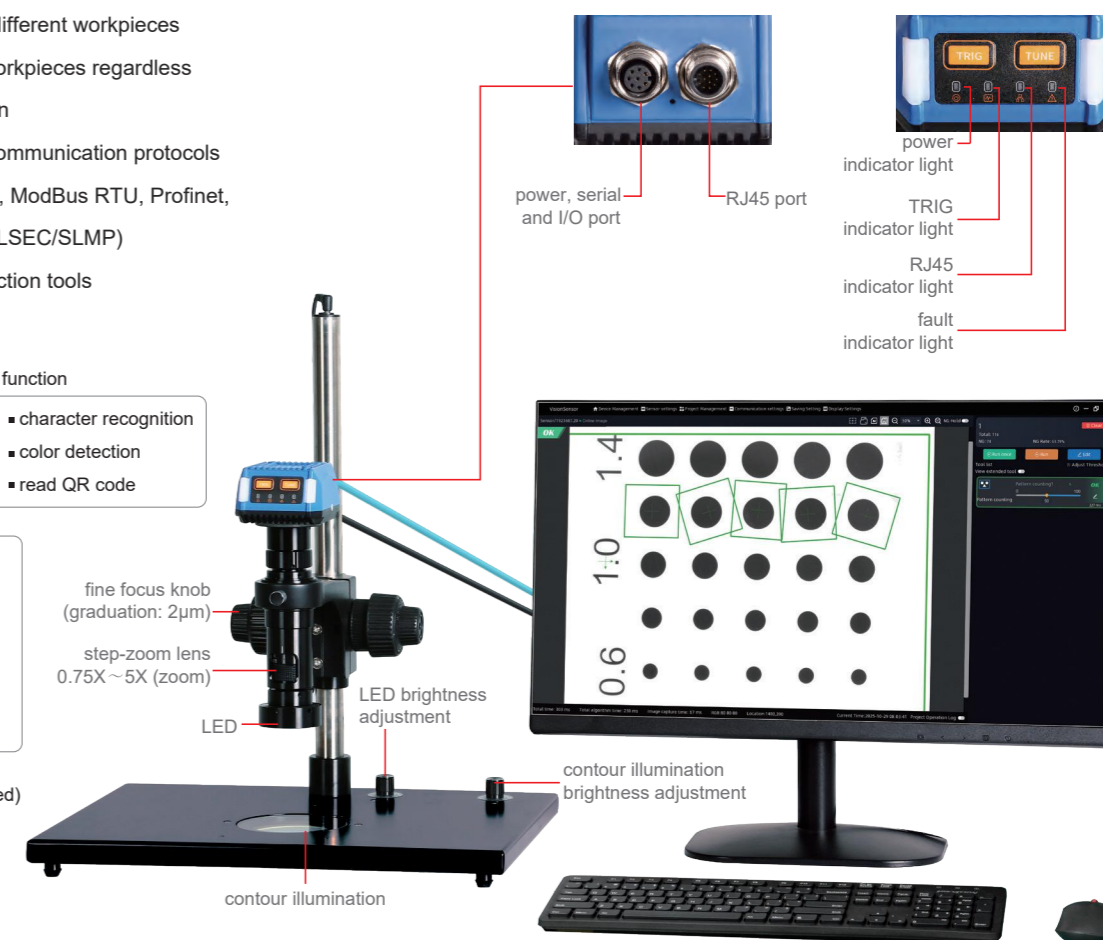
AUTOMATIC  
RECOGNITIONAUTOMATIC  
MEASUREMENTAUTOMATICALLY LOCATE WORKPIECES  
REGARDLESS OF POSITION AND DIRECTION

- Industrial vision inspection
- Automatically identify different workpieces
- Automatically locate workpieces regardless of position and direction
- Supporting industrial communication protocols (TCP/IP, ModBus TCP, ModBus RTU, Profinet, Ethernet/IP, Serial, MELSEC/SLMP)
- Including multiple detection tools

- camera function
- dimension measurement
  - contour matching
  - object counting
  - character recognition
  - color detection
  - read QR code



63×63mm calibration plate with 1mm graduation (included)



#### SPECIFICATION

Magnification*	13.5X~90X
View field	17×14~2.5×2mm
Sensor	1/1.8" CMOS
Pixel	5M
Resolution	2448×2048
Single pixel size	2.74×2.74μm
Frame rate	30fps
Focus distance	70±2mm
Output	RJ45
Power Supply	power adapter
Dimension (L×W×H)	570×300×430mm
Net weight	6kg

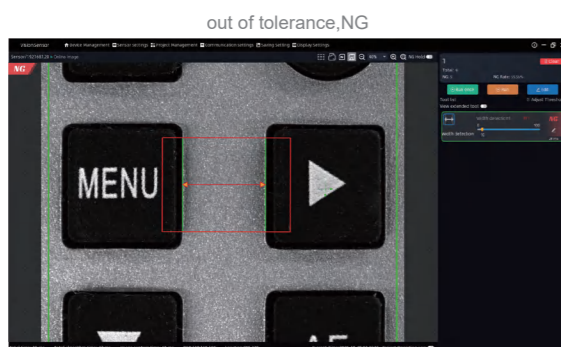
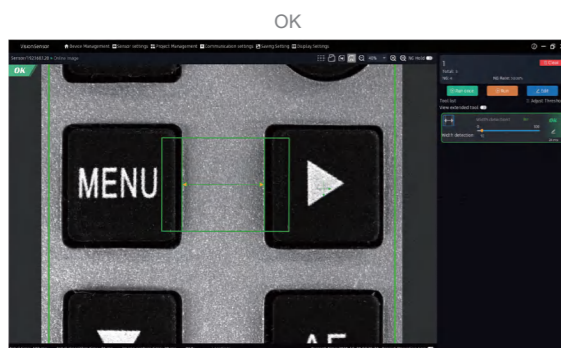
\*Magnification for using the measuring tool: 13.5X~54X

#### STANDARD DELIVERY

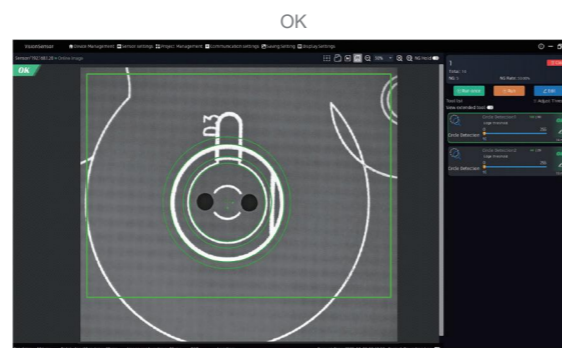
Main unit (with stand)	1 pc
0.5X camera adapter	1 pc
1X auxiliary objective	1 pc
Mouse	1 pc
LCD (21.5")	1 pc
Computer	1 pc
Calibration plate	1 pc
Communication cable	1 pc
Power cable	1 pc
Power adapter	1 pc

Continued from previous page

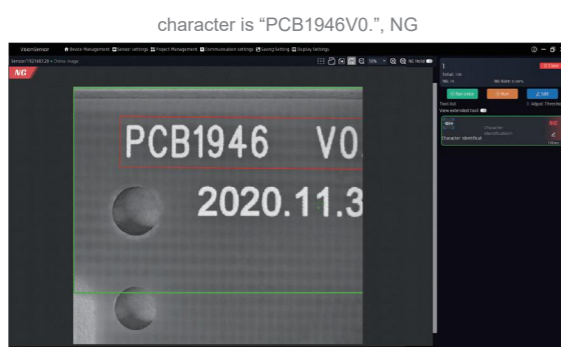
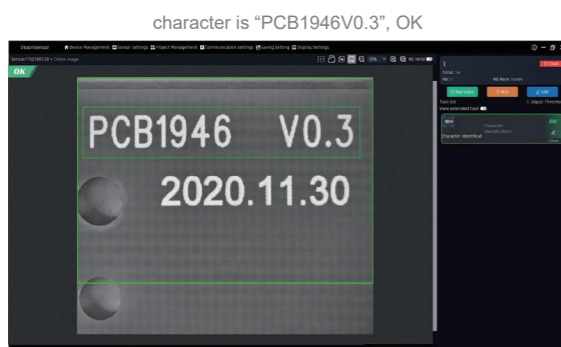
dimension measurement  
automatically locate and measure, and judge OK or NG



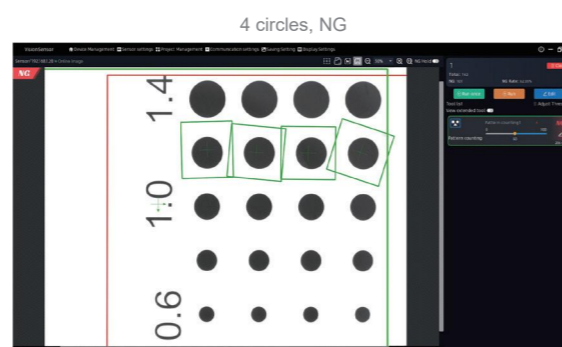
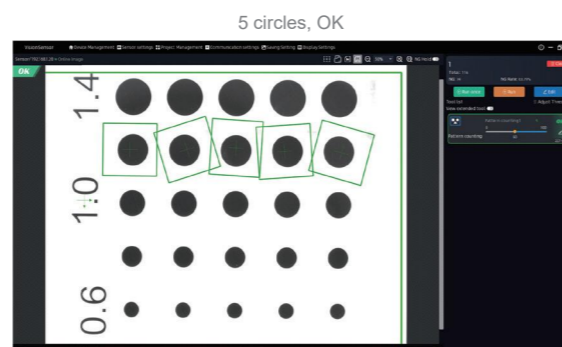
circle diameter inspection  
detection circle diameter, and judge OK or NG



character recognition  
automatically detect letters or numbers in the area, and judge OK or NG



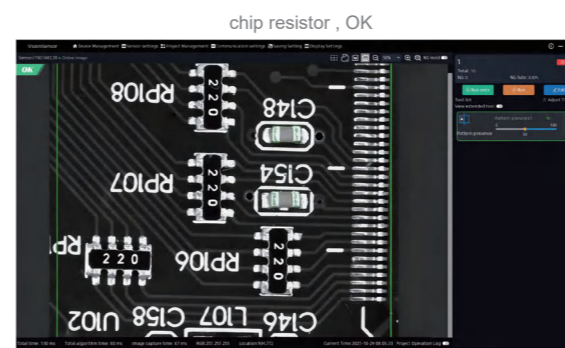
counting  
automatically locate and count, and judge OK or NG



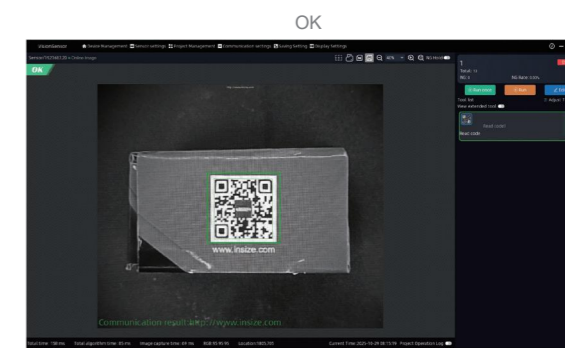
To be continued

Continued from previous page

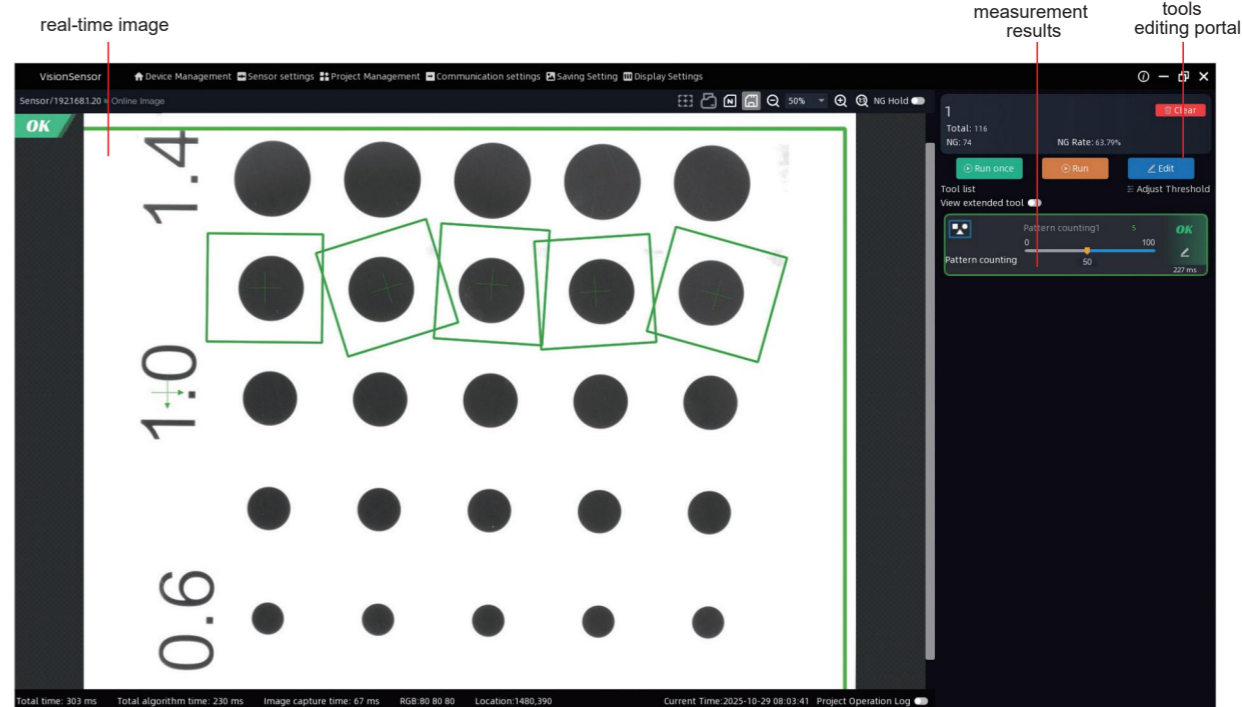
existence or absence  
automatically detect the existence or absence of the target



QR code recognition  
automatically scan the QR code and determine if it is damaged



## SOFTWARE FOR COMPUTER (INCLUDED)



AUXILIARY OBJECTIVES

Suitable for digital microscopes

5303-AF103, 5310-DL401, 5315-S710, ISM-DL300, ISM-DL301, ISM-DL400, ISM-DL510, 5317-AF109, 5317-AF110



0.3X auxiliary objective ISM-DL-OB03X  
0.5X auxiliary objective ISM-DL-OB05X  
0.75X auxiliary objective ISM-DL-OB075X  
1X auxiliary objective ISM-DL-OB1X  
1.5X auxiliary objective ISM-DL-OB1D5X  
2X auxiliary objective ISM-DL-OB2X

MAGNIFICATION, FOCUS DISTANCE AND VIEW FIELD (5303-AF103)

Auxiliary objective	Specification	Camera adapter	
		0.5X (included)	1X (optional)
0.3X (optional)	magnification	6~37X	12~74X
	focus distance	120~310mm	120~310mm
	view field	52×30~8×5mm	26×15~4×2.5mm
0.5X (optional)	magnification	10~61X	20~123X
	focus distance	78~230mm	78~230mm
	view field	37×20~5×3mm	18×10~2.5×1.5mm
0.75X (optional)	magnification	15~92X	30~184X
	focus distance	60~125mm	60~125mm
	view field	21×13~3.4×2mm	10×6.5~1.7×1mm
1X (included)	magnification	20~123X	40~246X
	focus distance	48~84mm	48~84mm
	view field	15×8~2.5×1.5mm	7.5×4~1.3×0.7mm
1.5X (optional)	magnification	30~184X	60~368X
	focus distance	36~63mm	36~63mm
	view field	10×6~1.7×1mm	5×3~0.9×0.5mm
2X (optional)	magnification	40~246X	80~492X
	focus distance	24~42mm	24~42mm
	view field	7.5×4~1.3×0.7mm	3.8×2~0.7×0.4mm

MAGNIFICATION, FOCUS DISTANCE AND VIEW FIELD (ISM-DL300, ISM-DL301, ISM-DL510)

Auxiliary objective	Specification	Camera adapter	
		0.5X (included)	1X (optional)
0.3X (optional)	magnification	5~34X	10~68X
	focus distance	287±2mm	287±2mm
	view field	42×26~6.5×4.5mm	21×13~3.3×2.3mm
0.5X (optional)	magnification	9~56X	18~112X
	focus distance	166±2mm	166±2mm
	view field	25.6×16.8~4×2.6mm	12.8×8.4~2×1.3mm
0.75X (optional)	magnification	13~84X	26~168X
	focus distance	105±2mm	105±2mm
	view field	17×10.5~2.6×1.7mm	8.5×5.3~1.3×0.9mm
1X (included)	magnification	15~100X	30~200X
	focus distance	70±2mm	70±2mm
	view field	16×11~2.5×1.6mm	7.8×5.3~1.2×0.8mm
1.5X (optional)	magnification	26~168X	52~336X
	focus distance	42±2mm	42±2mm
	view field	8.5×5.2~1.3×0.9mm	4.3×2.6~0.7×0.5mm
2X (optional)	magnification	30~200X	60~400X
	focus distance	29±2mm	29±2mm
	view field	7.8×5.3~1.2×0.8mm	3.8×2.7~0.6×0.4mm

\*For auxiliary objectives 0.3X, 0.5X, 0.75X, use contour illumination of ISM-DL301, ISM-DL400, ISM-DL510, 5310-DL401 or LED light

X-Y METAL STAGE  
CODE ISM-DL-STAGE1

Suitable for digital microscopes

5315-S710, 5301-D400, 5313-S407, 5310-DL401, 5303-AF103, ISM-DL300, ISM-DL301, ISM-DL302, ISM-DL520,5318-MD60-XY



SPECIFICATION

X-Y travel range	100×86mm
Dimension (L×W×H)	180×180×50mm
Net weight	2.3kg

LED RING LIGHT  
CODE ISM-LED-9245R

Diffuser plate is included to reduce the reflective effect on workpieces

Suitable for digital microscopes

5315-S710, 5310-DL401, ISM-DL400, ISM-DL300, ISM-DL301, ISM-DL302, 5303-AF103, ISM-DL510

RED, GREEN, BLUE, INFRARED AND UV LIGHT CAN BE CUSTOMIZED  
ATTENTION: MUST BE USED WITH LIGHT BRACKET AND LIGHT CONTROLLER



SPECIFICATION

Light color	white	Angle	45°
Power supply	24V	Outside/inside diameter	92/52mm
Power	5.5W		

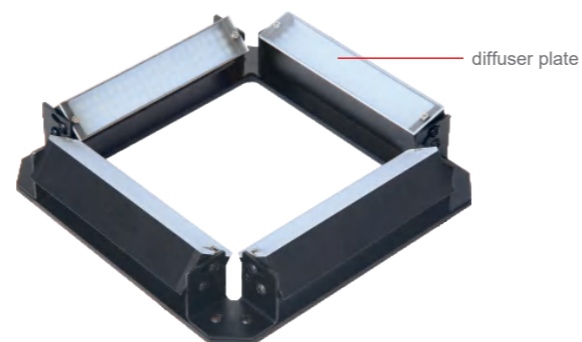
## LED SQUARE LIGHT CODE ISM-LED-100L4

RED, GREEN, BLUE, INFRARED AND  
UV LIGHT CAN BE CUSTOMIZED

ATTENTION: MUST BE USED WITH LIGHT  
BRACKET AND LIGHT CONTROLLER

- Diffuser plate is included to reduce the reflective effect on workpieces
- Angle and brightness can be adjusted independently
- Suitable for digital microscopes

5315-S710, 5310-DL401, ISM-DL400, ISM-DL300,  
ISM-DL301, ISM-DL302, 5303-AF103, ISM-DL510



### SPECIFICATION

Light color	white	Angle	0~90°
Power supply	24V	Dimension (L×W×H)	154×154×30mm
Power	10.36W		

## DIGITAL LIGHT CONTROLLER CODE ISM-LED-CTRL

- 256 (0-255) steps of brightness adjustment
- With power off memory function and short circuit protection function
- Suitable for ISM-LED-100L4, ISM-LED-9245R



### SPECIFICATION

Power supply	100~240V, 50/60HZ	Output voltage (rated)	24V
Output power (rated)	60W	Dimension (L×W×H)	145×118×83mm

## BRACKET FOR LIGHTS CODE ISM-LED-BRACKET

- 4 pcs L-shape bars are included, multiple combinations can be realized
- Suitable for ISM-LED-100L4, ISM-LED-9245R



application



### SPECIFICATION

Size (L×W×H)	260×300×20mm
Net weight	0.7kg

## COAXIAL LIGHT CODE ISM-DL-COAXIAL

Suitable for digital microscopes

5315-S710, 5310-DL401, ISM-DL400, ISM-DL300, ISM-DL301,  
ISM-DL302, 5303-AF103, ISM-DL510



for smooth surfaces and small holes,  
brightness is adjustable



### SPECIFICATION

Power	1W
Power supply	0~3.4V, 0~400mA



MEASUREMENT SOLUTION PROVIDER

[www.insize.com](http://www.insize.com)



+86-512-68099993

[sales@insize.com](mailto:sales@insize.com)

80 Xiangyang Road, Suzhou New District, 215009 China