

VISION MEASURING SYSTEMS

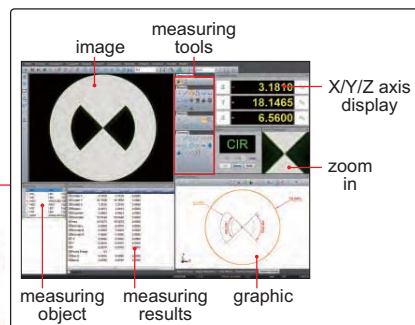


lens with coaxial light (optional, must be installed in factory)



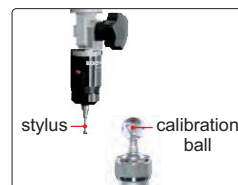
ISD-V250A

computer is included



SPECIFICATION

Code	ISD-V150A	ISD-V250A	ISD-V300A	ISD-V400A
Measuring range (X×Y×Z)	150×100×200mm	250×150×200mm	300×200×200mm	400×300×200mm
Stage size	354×228mm	450×280mm	500×330mm	606×466mm
Stage glass size	210×160mm	306×196mm	350×250mm	450×350mm
Resolution of X/Y/Z axis	0.5μm			
Accuracy of X/Y axis	≤(2.5+L/100)μm (L is the measuring length in mm)			
Repeatability of X/Y axis	2μm			
Objective	0.7X~4.5X (zoom)			
Working distance	92mm			
Magnification	33X~195X (on 19" monitor)			
Camera	1/3" color CCD, 0.3M pixel			
Illumination	surface and contour with adjustable LED			
Max. height of workpiece	160mm			
Max. weight of workpiece	20kg			
Operation system	Windows 7/8/10			
Drive method	manual			
Power supply	110/220V, 50/60Hz			
Dimension (L×W×H)	560×540×850mm	760×600×900mm	760×600×900mm	970×670×940mm
Weight	100kg	120kg	140kg	240kg



probe (optional), includes Ø2mm and Ø3mm styli, Ø25mm calibration ball, measuring accuracy is 10μm

STANDARD DELIVERY

Main unit	1 pc
Computer	1 pc
Calibration glass chart	1 pc
Clay	1 pc
Foot switch	1 pc
Anti-dust cover	1 pc

SOFTWARE

- Operation system: Windows 7/8/10
- Language: English
- Single measuring tools:

	measure coordinate of point		measure center coordinate, diameter and area of circle
	measure distance of two elements		measure length, width and diameter of key slot
	measure focus distance of surface		measure length, width and area of rectangle
	measure distance between two points		measure length and diameter of arc
	measure width and diameter of ring		measure length and area of closed curve
	measure angle of two lines		measure center coordinate and axis length of ellipse
	measure length of open curve		

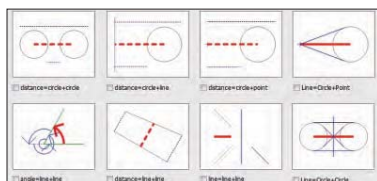
OPTIONAL ACCESSORY

0.5X auxiliary objective	Code: ISD-V-OB05X Working distance: 175mm Magnification: 16.5~97.5X (on 19" monitor)
2X auxiliary objective	Code: ISD-V-OB2X Working distance: 36mm Magnification: 66~390X (on 19" monitor)
Probe	Code: ISD-V-PROBE Includes Ø2mm and Ø3mm styli, Ø25mm calibration ball
Vision measuring system with coaxial light lens (with computer)	Code: ISD-V150ACL, ISD-V250ACL, ISD-V300ACL, ISD-V400ACL

To be continued

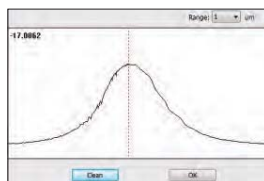
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Combined measuring tools:

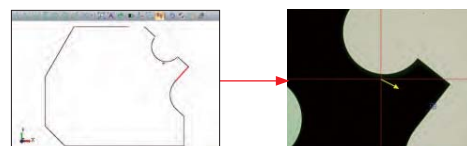


measure distance and angle of two elements

Focus indicator:

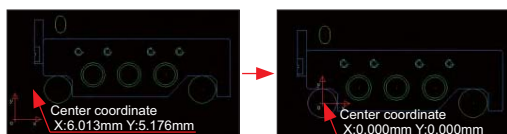


CAD measuring:

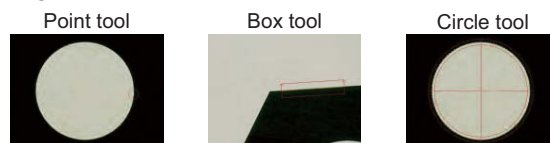


Input CAD drawing and set reference, move the stage to make the target box in the center of crosshair, then the software will do automatic measurement

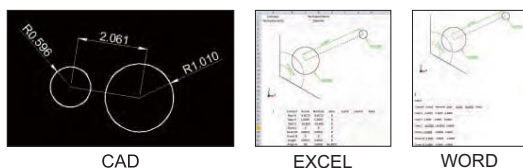
Coordinate transfer:



Edge-detection:



Data export to CAD, EXCEL and WORD:



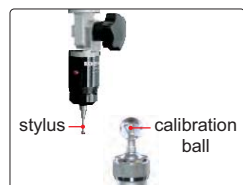
Contour scanning:



Profile detection:



CNC VISION MEASURING SYSTEMS



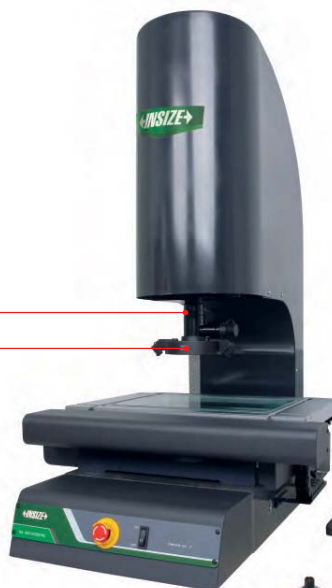
probe (optional), includes Ø2mm and Ø3mm styli, Ø25mm calibration ball, measuring accuracy is 10µm



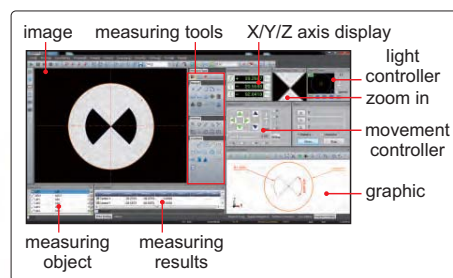
lens with coaxial light (included)



programmable segmented ring light (included)



ISD-V220CNCA



computer is included



controller

STANDARD DELIVERY

Main unit	1 pc
Computer	1 pc
Controller	1 pc
Calibration glass chart	1 pc
Clay	1 pc
Anti-dust cover	1 pc

- Automatic edge-detection, focus, measuring, contour scanning, calibration, etc.
- Servo motors for X, Y, Z axis
- SPC function for large quantity measurement

To be continued

Continued from previous page

SPECIFICATION

Code		ISD-V220CNCA **	ISD-V270CNCA **	ISD-V370CNCA **
Measuring range (X×Y×Z)		220×120×150mm	270×170×150mm	370×270×150mm
Stage size		450×280mm	500×330mm	606×466mm
Glass stage size		306×196mm	350×250mm	450×350mm
Resolution of X/Y/Z axis		0.5μm		
Accuracy of X/Y axis		≤(2.5+L/100)μm (L is the measuring length in mm)		
Repeatability of X/Y axis		2μm		
Objective		0.7X~4.5X (zoom)		
Working distance		92mm		
Magnification		20X~128X (on 19.5" monitor)		
Camera		1/2" color CCD, 0.4M pixel		
Illumination	surface	coaxial light, programmable segmented ring light		
	contour	adjustable LED light		
View field (diagonal length)		1.7~11.1mm		
Max. height of workpiece		160mm		
Max. weight of workpiece		30kg		
Operation system		Windows 7/8/10		
Drive method		Automatic		
Power supply		220V, 50/60Hz **		
Dimension (L×W×H)		760×600×900mm	760×600×900mm	970×670×940mm
Weight		146kg	168kg	266kg

** Add "U" on code NO. when power supply is 110V, 50/60Hz

OPTIONAL ACCESSORY

0.5X auxiliary objective	Code: ISD-V-OB05X Working distance: 175mm Magnification: 10~64X (on 19.5" monitor)
2X auxiliary objective	Code: ISD-V-OB2X Working distance: 36mm Magnification: 40~256X (on 19.5" monitor)
Probe	Code: ISD-V-PROBE Includes Ø2mm and Ø3mm styli, Ø25mm calibration ball

SOFTWARE

■ Operation system: Windows 7/8/10

■ Language: English

■ Single measuring tools:



measure distance between two points



measure length and area of closed curve



measure coordinate of point



measure length and diameter of arc



measure center coordinate and axis length of ellipse



measure angle of two lines



measure width and diameter of ring



measure length, width and diameter of key slot



measure distance of two elements



measure focus distance of surface



measure length, width and area of rectangle

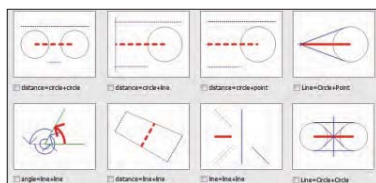


measure length of open curve



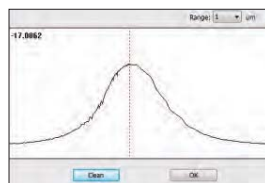
measure center coordinate, diameter and area of circle

■ Combined measuring tools:



measure distance and angle of two elements

■ Focus indicator:



■ CAD measuring:



Input CAD drawing and set reference, move the stage to make the target box in the center of crosshair, then the software will do automatic measurement

■ Edge-detection:

Point tool



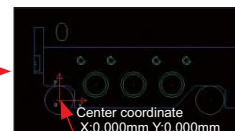
Box tool



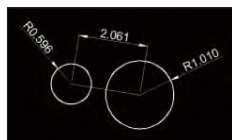
Circle tool



■ Coordinate transfer:



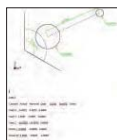
■ Data export to CAD, EXCEL and WORD:



CAD



EXCEL



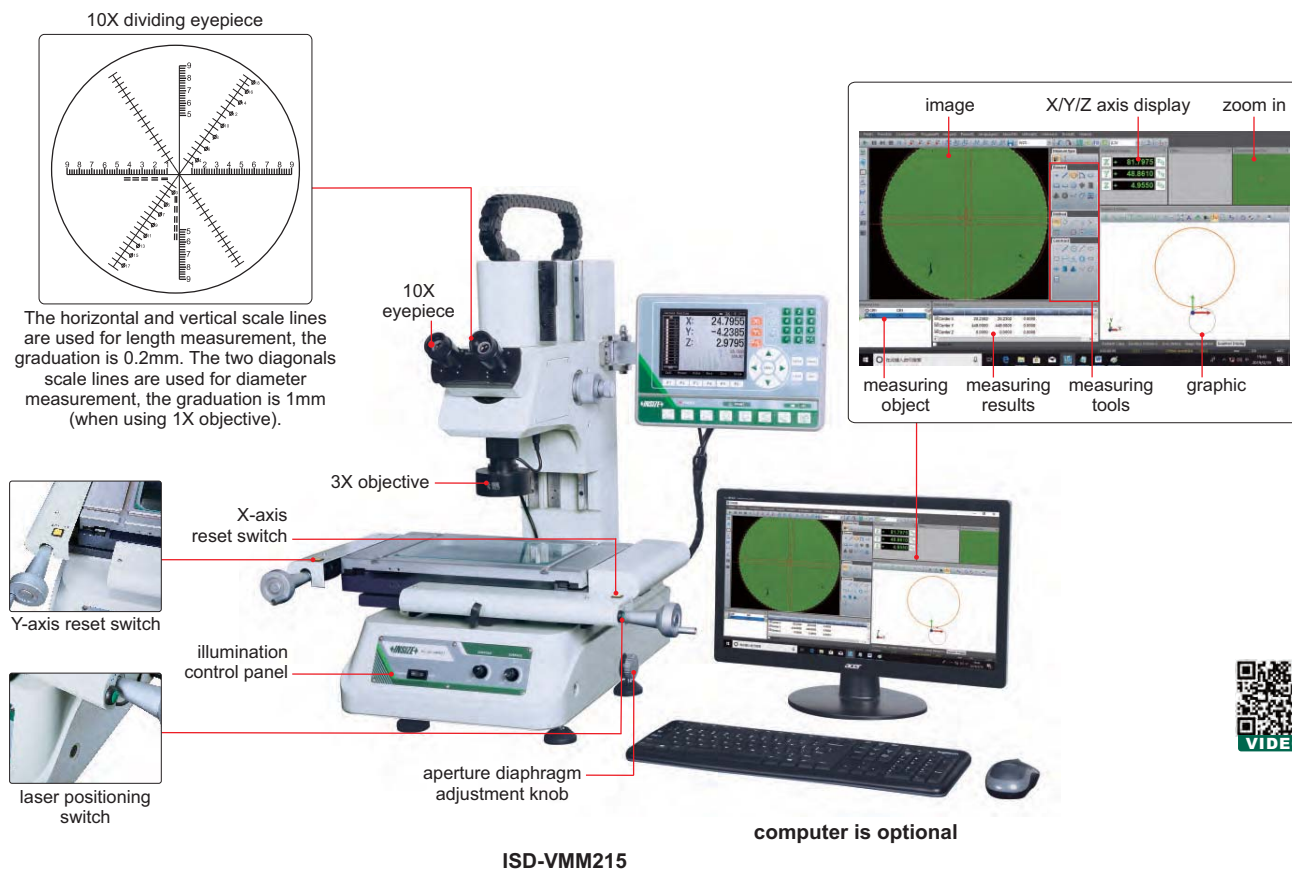
WORD

■ Contour scanning:



■ Profile detection:





SPECIFICATION

Code	Binocular	ISD-VMM205	ISD-VMM215	ISD-VMM225	ISD-VMM235
	Monocular	ISD-VMM205D	ISD-VMM215D	ISD-VMM225D	ISD-VMM235D
X/Y axis travel		150×100mm	200×100mm	250×150mm	300×200mm
Z axis travel		150mm	150mm	200mm	200mm
Metal stage size		354×228mm	404×228mm	450×280mm	500×330mm
Glass stage size		210×160mm	260×160mm	306×196mm	350×250mm
Resolution of X/Y/Z axis		0.5μm			
Accuracy of X/Y axis		≤(2.5+L/100)μm (L is the measuring length in mm)			
Repeatability		2μm			
Camera		1/3" color CCD, 0.3M pixel			
Optical magnification		30X			
Image magnification		114X (on 19" monitor)			
Illumination		surface and contour with adjustable LED			
Max. weight of workpiece		25kg			
Power supply		100V~240V, 50/60Hz			
Operating system		Windows 7/8/10			
Drive method		manual			
Dimension (L×W×H)		540×667×850mm	540×667×850mm	800×675×920mm	800×675×920mm
Weight		100kg	110kg	135kg	140kg

To be continued

Continued from previous page

DATA PROCESSING UNIT

Output	RS232
Function	Easy measuring tools
	Measure coordinate of points
	Measure lines
	Measure center coordinate, radius of circle with three points
	Measure distances between two objects
	Measure angles
	Set origin of coordinate
	Skew and calibrate the workpiece
	Measure rectangle (including length, width, perimeter and center coordinate)
	Measure thread (including thread diameter, screw pitch, screw angle)
	Measure slot (including center coordinate, length, width)

STANDARD DELIVERY

Main unit	1 pc
Video card with dongle	1 pc
Software disc	1 pc
Calibration glass chart	1 pc
Demo sample	1 pc
Foot switch	1 pc
3X objective	1 pc

OPTIONAL ACCESSORY

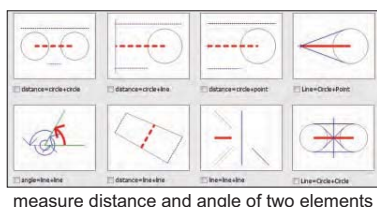
1X objective	ISD-VMM-LENS1X
5X objective	ISD-VMM-LENS5X
10X objective	ISD-VMM-LENS10X
Printer	ISD-VMM-PRINTER
Toolmaker microscopes (with computer)	Code: ISD-VMM205A (binocular) ISD-VMM215A (binocular) ISD-VMM225A (binocular) ISD-VMM235A (binocular)
	Code: ISD-VMM205DA (monocular) ISD-VMM215DA (monocular) ISD-VMM225DA (monocular) ISD-VMM235DA (monocular)

SOFTWARE

- **Operation system:** Windows 7/8/10
- **Language:** English
- **Single measuring tools:**

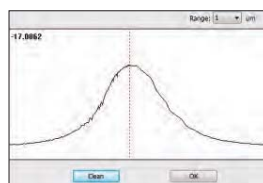
	measure distance between two points		measure length and area of closed curve		measure coordinate of point
	measure length and diameter of arc		measure center coordinate and axis length of ellipse		measure angle of two lines
	measure width and diameter of ring		measure length, width and diameter of key slot		measure distance of two elements
	measure focus distance of surface		measure length, width and area of rectangle		measure length of open curve
	measure center coordinate, diameter and area of circle				

Combined measuring tools:



measure distance and angle of two elements

Focus indicator:

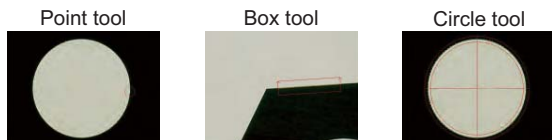


CAD measuring:

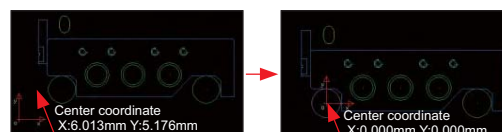


Input CAD drawing and set reference, move the stage to make the target box in the center of crosshair, then the software will do automatic measurement

Edge-detection:



Coordinate transfer:



Data export to CAD, EXCEL and WORD:



Contour scanning:



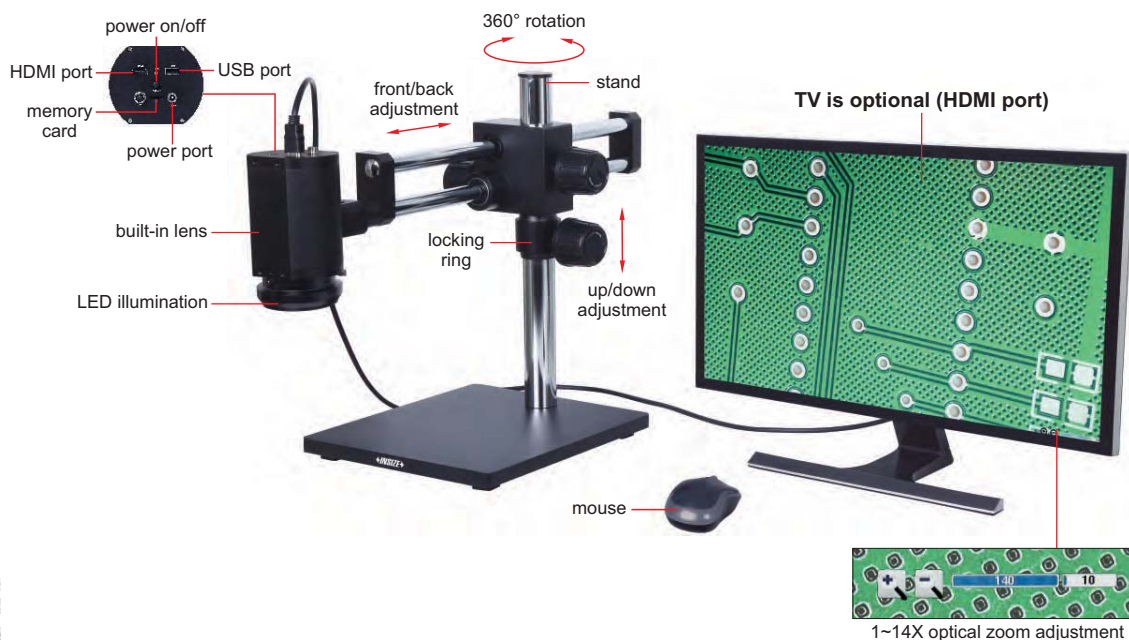
Profile detection:



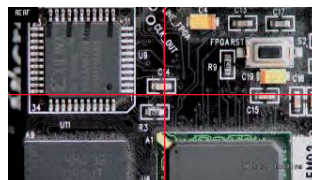
AUTO FOCUS

TAKE PICTURES
AND VIDEOS

AUTO FOCUS DIGITAL MICROSCOPE CODE 5302-AF105



- 1080P high-definition image
- Auto focus camera
- Take pictures and videos, saved to memory card
- Connected to TV by HDMI port
- Automatic exposure and white balance
- Brightness, contrast ratio, gain are adjustable
- Display cross hair (blue/green/red/yellow/black/brown colors)



display cross hair
(blue/green/red/yellow/black/brown colors)



8G memory card
and holder (included)

SPECIFICATION

Magnification	1.8X~27.5X (on 28" TV)
Sensor	1/2.8" CMOS
Pixel	2M
Resolution	1920×1080
Frame rate	60fps
Auto focus distance	100mm~∞
Output	HDMI
Power supply	power adapter
Dimension (L×W×H)	500×280×410mm
Weight	17kg

STANDARD DELIVERY

Main unit (with stand)	1 pc
LED illumination	1 pc
8G memory card and holder	1 pc
Mouse	1 pc
HDMI cable (for TV)	1 pc
Power adapter	2 pcs

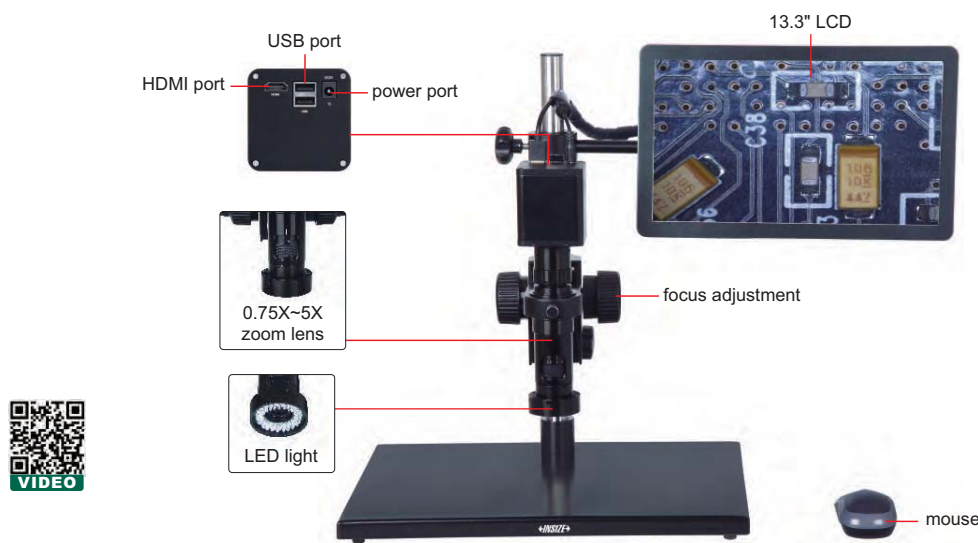
FOCUS DISTANCE, MAGNIFICATION AND VIEW FIELD (MANUAL FOCUS)

Focus distance	Adjustable magnification (on 28" TV)	View field
100mm	4.5~27.5X	24×14~161×90mm
150mm	3~21X	30×17~240×128mm
200mm	2.3~17.5X	38×20~305×176mm
250mm	2~15X	42×24~320×210mm
270mm	1.8~14.4X	43×25~378×240mm

AUTO FOCUS DIGITAL MICROSCOPE (WITH DISPLAY) CODE 5303-AF103

AUTO FOCUS

TAKE PICTURES
AND VIDEOS



- 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)



0.5X camera adapter
(included)



1X auxiliary objective
(included)



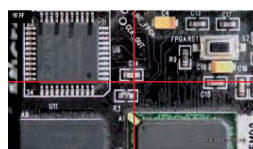
16G USB flash disk
(included)



2X auxiliary objective
(optional)



1X camera adapter
(optional)



display cross hair
(blue/green/red/yellow/
black/brown colors)

X-Y glass stage
(optional)
(X-Y travel: 74×60mm)



SPECIFICATION

Magnification	20X~123X
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
Weight	6.5kg

STANDARD DELIVERY

Main unit	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
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	20~123X	40~246X
	Focus distance	48~84mm	48~84mm
	View field	13×7~2.2×1mm	6.3×3.5~1.1×0.5mm
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

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

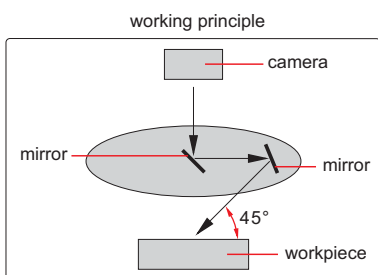
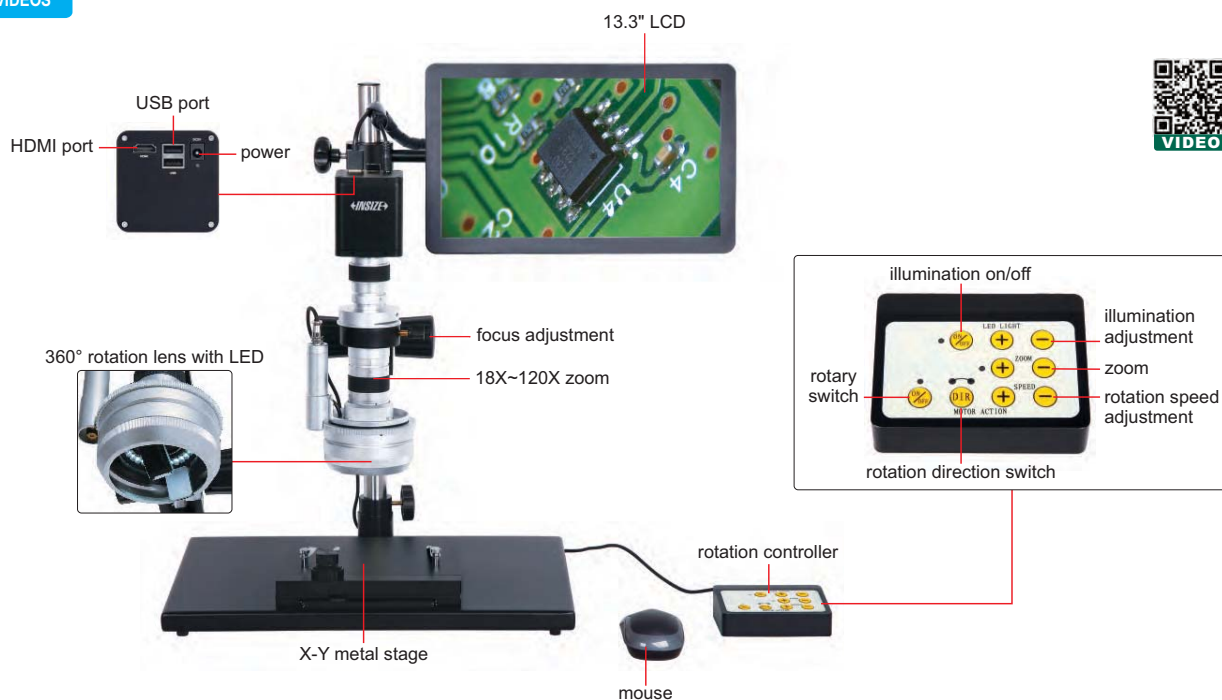
OPTIONAL ACCESSORY

1X camera adapter	ISM-DL-CA1X
2X auxiliary objective	ISM-DL-OB2X
X-Y glass stage (travel: 74×60mm)	ISM-DL-STAGE
X-Y metal stage	ISM-DL-STAGE1
LED auxiliary lighting	ISM-DL-LED
Lens with coaxial light	ISM-DL-COAXIAL
Auxiliary objective	page 258

SUITABLE TO CHECK CONVEX
OBJECTS AND WALL OF HOLE

TAKE PICTURES
AND VIDEOS

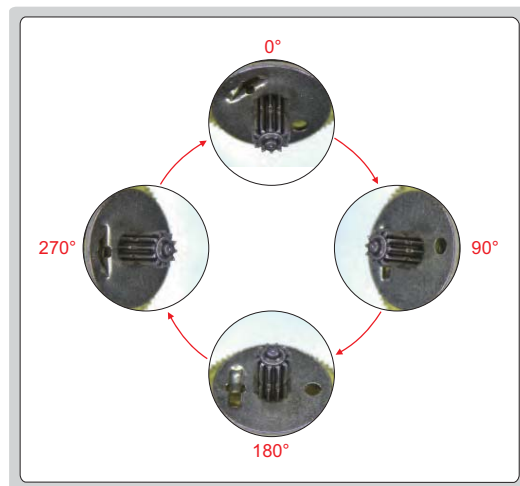
3D MOTORIZED ROTATION MICROSCOPE (WITH DISPLAY) CODE 5301-D400



- 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

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
Rotation speed	2~5RPM
Power supply	110/220V, 50/60Hz
Dimension (L×W×H)	570×300×430mm
Weight	10kg



360° rotation observation

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

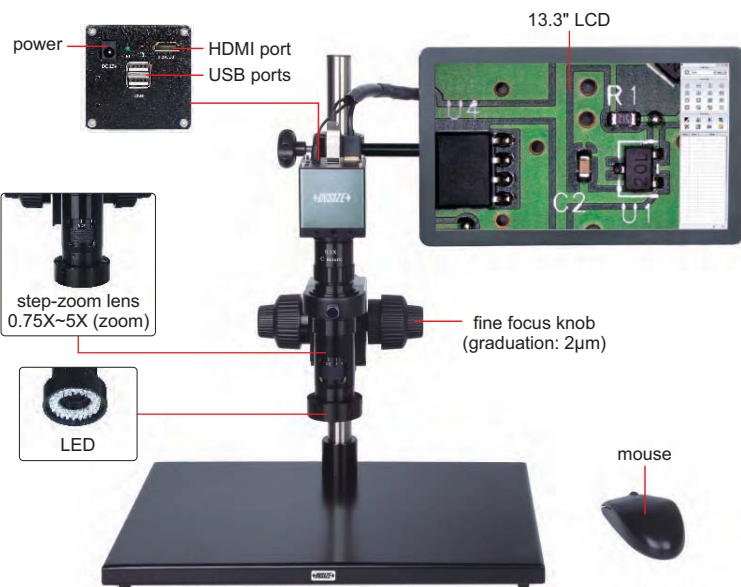
DIGITAL MEASURING MICROSCOPES (WITH DISPLAY)

BUILT-IN SOFTWARE
WITHOUT COMPUTER

MEASUREMENT

TAKE
PICTURES

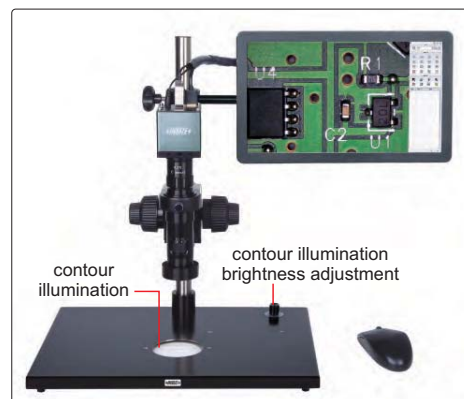
ATTENTION: PLEASE MAKE CONFOCAL ADJUSTMENT AFTER
CHANGING CAMERA ADAPTERS OR AUXILIARY OBJECTIVES



ISM-DL300 (without contour illumination)



- 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



ISM-DL301 (with contour illumination)



0.5X camera adapter
(included)



1X auxiliary objective
(included)



1X camera adapter
(optional)



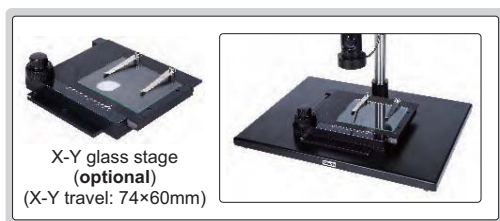
calibration plate
(included)



16G USB flash disk
(included)



2X auxiliary objective
(optional)



X-Y glass stage
(optional)
(X-Y travel: 74×60mm)

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	power adapter and 220V, 50/60Hz**
Dimension (L×W×H)	570×300×430mm	
Weight	6.5kg	

** Add "-U" on code No. when power supply is 110V, 50/60Hz

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

OPTIONAL ACCESSORY

1X camera adapter	ISM-DL-CA1X
2X auxiliary objective	ISM-DL-OB2X
X-Y glass stage (travel: 74×60mm)	ISM-DL-STAGE
X-Y metal stage	ISM-DL-STAGE1
LED auxiliary illumination	ISM-DL-LED
Coaxial light illumination	ISM-DL-COAXIAL
Auxiliary objective	page 258

To be continued

Continued from previous page

MEASURING ACCURACY

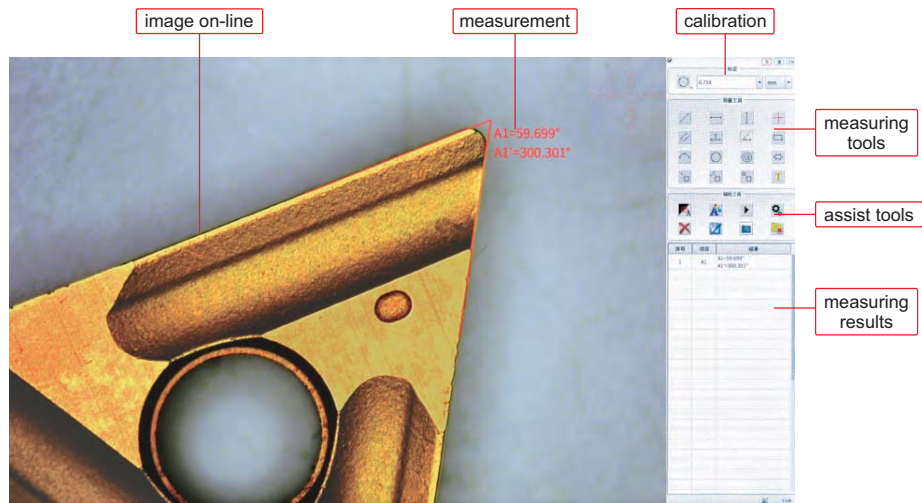
Objective magnification	Image magnification	Measuring accuracy
0.75X	15X	±8μm
1X	20X	±7μm
1.5X	30X	±6μm
2X	40X	±6μm
2.5X	50X	±6μm
3X	60X	±5μm
3.5X	70X	±5μm
4X	80X	±4μm
4.5X	90X	±4μm
5X	100X	±4μm

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

MAGNIFICATION, FOCUS DISTANCE AND VIEW FIELD

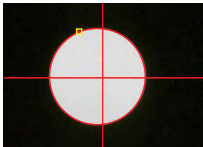
Auxiliary objective	Specification	Camera adapter	
		0.5X (included)	1X (optional)
1X (included)	Magnification	15~100X	30~200X
	Focus distance	70±2mm	70±2mm
	View filed	16×11~2.5×1.6mm	7.8×5.3~1.2×0.8mm
2X (optional)	Magnification	30~200X	60~400X
	Focus distance	29±2mm	29±2mm
	View filed	7.8×5.3~1.2×0.8mm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

SOFTWARE

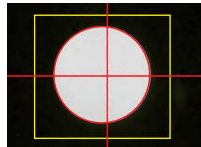


- **Language:** English
- **Output to Excel**
- **Edge-detection:**

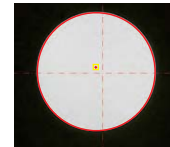
Point tool



Box tool



Click tool



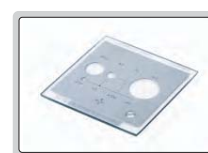
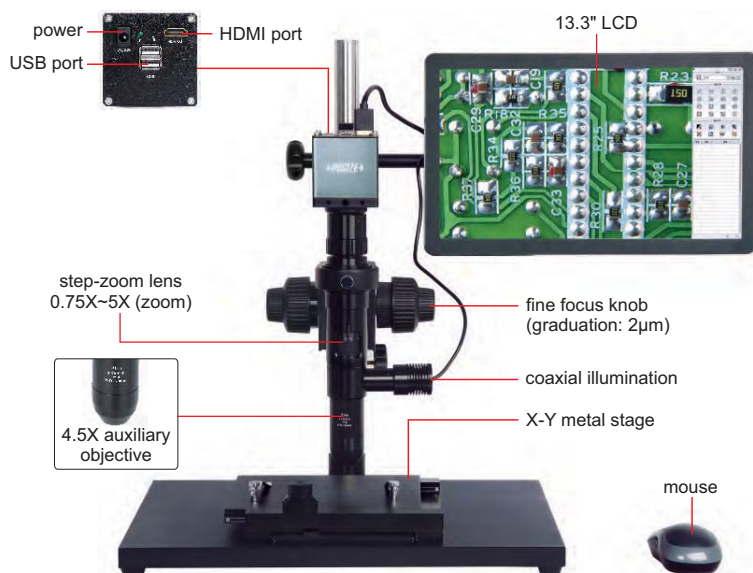
Measurement tools:

- | | | |
|--|---|---|
| measure length of line or distance between two points | measure length of line or distance between two points in horizontal direction | measure length of line or distance between two points in vertical direction |
| measure angle from horizontal line | measure angle from vertical line | measure angle of two lines |
| measure distance between two parallel lines | measure distance between three parallel lines | measure distance between multiple parallel lines |
| measure distance between point and line | measure radius, length and angle of arc | measure girth and area of polygon |
| measure radius, diameter, girth and area of circle with three points | measure radius, diameter, girth and area concentric of circles | measure length, width, girth and area of rectangle |
| measure minimum distance between point and circle | measure distance between point and center of circle | measure maximum distance between point and circle |
| measure minimum distance between line and circle | measure distance between line and center of circle | measure maximum distance between line and circle |
| measure minimum distance between two circles | measure center distance between two circles | measure maximum distance between two circles |
| add text | measure radius, diameter, girth and area of circle with two points | cross hair |

HIGH MAGNIFICATION MEASURING MICROSCOPE (WITH DISPLAY) CODE ISM-DL302

REFER TO ISM-DL300 FOR
SOFTWARE FUNCTION

OBSERVATION AND MEASUREMENT
AT HIGH MAGNIFICATION



calibration plate
(included)



0.5X camera adapter
(included)



16G USB flash disk
(included)



LED auxiliary illumination
(optional)



1X camera adapter
(optional)

- 1080P high-definition image
- Maximum 1000X 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

SPECIFICATION

Magnification	78X~504X
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
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

OPTIONAL ACCESSORY

1X camera adapter	ISM-DL-CA1X
LED auxiliary illumination	ISM-DL-LED

MEASURING ACCURACY

Objective magnification	Image magnification	Measuring accuracy
0.75X	78X	±5μm
1X	102X	±4μm
1.5X	153X	±4μm
2X	204X	±4μm
2.5X	255X	±4μm
3X	305X	±4μm
3.5X	356X	±4μm
4X	408X	±4μm
4.5X	458X	±4μm
5X	504X	±4μm

MAGNIFICATION, FOCUS DISTANCE AND VIEW FIELD

Camera adapter	0.5X (included)	1X (optional)
Magnification	78~504X	156~1008X
Focus distance	14±2mm	14±2mm
View field	2.8×1.7~0.5×0.3mm	1.4×0.9~0.3×0.2mm

BUILT-IN SOFTWARE
WITHOUT COMPUTER



DIGITAL MEASURING MICROSCOPE (BASIC TYPE) CODE 5307-ID100

adjustable display angle



- Built-in software without computer, operated by mouse
- Take pictures, save to USB flash disk
- Measuring results can be sent to Excel

MEASURING ACCURACY*

Objective magnification	Image magnification	Measuring accuracy
0.7X	11X	±9μm
1X	16X	±9μm
1.5X	24X	±8μm
2X	32X	±7μm
2.5X	40X	±7μm
3X	48X	±7μm
3.5X	56X	±6μm
4X	64X	±6μm
4.5X	73X	±5μm

*Using 1X auxiliary objective (included)

SPECIFICATION

Sensor	1/2" CMOS
Pixel	2M
Resolution	1920×1080
Frame rate	60fps
Output	USB/HDMI
Power supply	power adapter
Dimension (L×W×H)	610×610×660mm
Weight	4.5kg

STANDARD DELIVERY

Main unit	1 pc
Calibration plate	1 pc
Power adapter	1 pc
Mouse	1 pc
16G USB flash disk	1 pc

OPTIONAL ACCESSORY

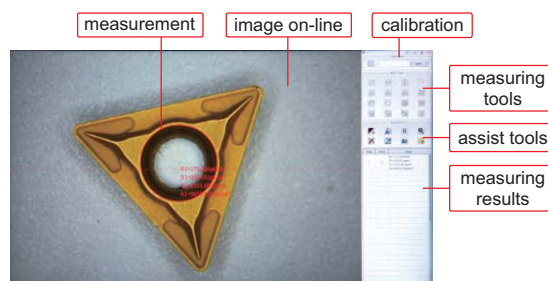
0.75X auxiliary objective	5307-ID100-OB07X
2X auxiliary objective	5307-ID100-OB2X

MAGNIFICATION, FOCUS DISTANCE AND VIEW FIELD

Specification	Auxiliary objective		
	0.75X (optional)	1X (included)	2X (optional)
Magnification	8~54X	11~73X	22~146X
Focus distance	132±2mm	105±2mm	46±2mm
View field	4.7×2.7~30.5×16mm	3.4×2~23×13mm	1.8×1~11.3×6.4mm

SOFTWARE

- Language: English
- Output to Excel
- Edge-detection
- Measurement tools:



- measure length of line or distance between two points
- measure distance between two parallel lines
- measure radius, length and angle of arc
- measure distance between point and line
- measure distance between line and center of circle
- measure length, width, girth and area of rectangle
- measure minimum distance between point and circle
- cross hair
- measure length of line or distance between two points in horizontal direction
- measure length of line or distance between two points in vertical direction
- measure angle of two lines
- measure radius, diameter, girth and area concentric of circles
- measure girth and area of polygon
- measure radius, diameter, girth and area of circle with three points
- measure center distance between two circles
- add text

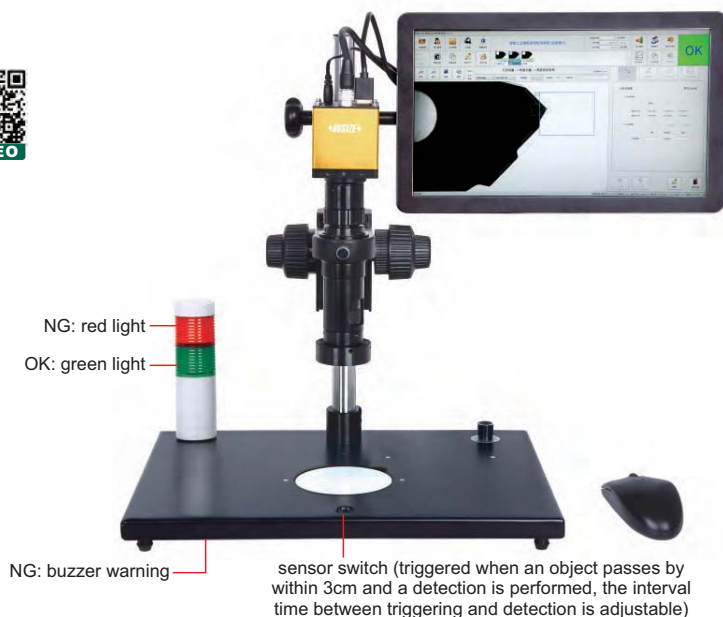
SMART MICROSCOPE CODE ISM-DL400**

AUTOMATICALLY LOCATE WORKPIECES
REGARDLESS OF POSITION AND DIRECTION

BUILT-IN SOFTWARE
WITHOUT COMPUTER



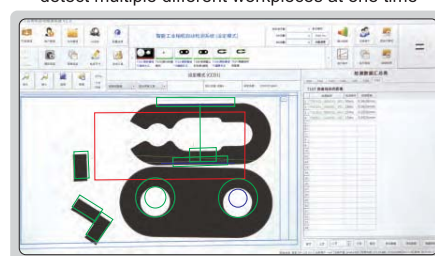
VIDEO



camera function

- surface defect detection
- dimension measurement
- read barcode
- burr detection
- contour matching
- character recognition
- color detection
- read QR code
- object counting
- thread measurement

detect multiple different workpieces at one time



- Automatically identify different workpieces
- Automatically locate workpieces regardless of position and direction
- Built-in software, PLC control input and output interface
- Including multiple detection tools
- Automatically calculate, store the test results and export to Excel

Tool	Tool Name	Tool Type	Tool ID	Tool Status	Tool Location
1	Cluster	OK	10	OK	10.00%
2	Cluster	OK	20	OK	20.00%
3	Cluster	OK	30	OK	30.00%
4	Cluster	OK	40	OK	40.00%
5	Cluster	OK	50	OK	50.00%
6	Cluster	OK	60	OK	60.00%
7	Cluster	OK	70	OK	70.00%
8	Cluster	OK	80	OK	80.00%
9	Cluster	OK	90	OK	90.00%
10	Cluster	OK	100	OK	100.00%

report showing the perform times of each tool, quantity of OK and NG, the report can be saved

Tool	Tool Name	Tool Type	Tool ID	Tool Status	Tool Location
1	Cluster	OK	10	OK	10.00%
2	Cluster	OK	20	OK	20.00%
3	Cluster	OK	30	OK	30.00%
4	Cluster	OK	40	OK	40.00%
5	Cluster	OK	50	OK	50.00%
6	Cluster	OK	60	OK	60.00%
7	Cluster	OK	70	OK	70.00%
8	Cluster	OK	80	OK	80.00%
9	Cluster	OK	90	OK	90.00%
10	Cluster	OK	100	OK	100.00%

report of each detection is automatically created and saved

SPECIFICATION

Magnification	15X~100X
Resolution	1920×1080
Pixel	2M
Single pixel size	3.75×3.75μm
Frame rate	60fps
Sensor	1/2" CMOS
Chip structure	FPGA+ARM
Operating system	Linux 3.10
Power supply	220V, 50/60Hz **
Dimension (L×W×H)	570×300×430mm
Weight	6.5kg

** Add "-U" on code No. when power supply is 110V, 50/60Hz

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
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

OPTIONAL ACCESSORY

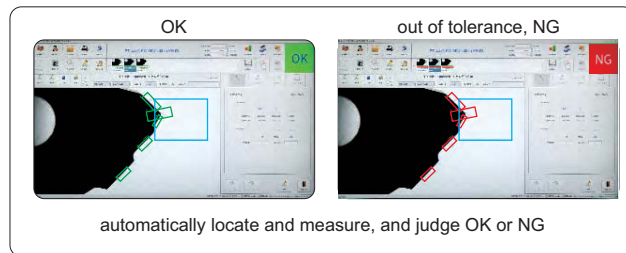
1X camera adapter	ISM-DL-CA1X
2X auxiliary objective	ISM-DL-OB2X
LED auxiliary illumination	ISM-DL-LED
Coaxial light illumination	ISM-DL-COAXIAL
Auxiliary objective	page 258

To be continued

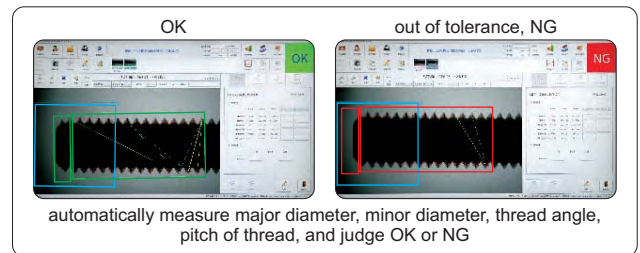
Continued from previous page

APPLICATION EXAMPLES:

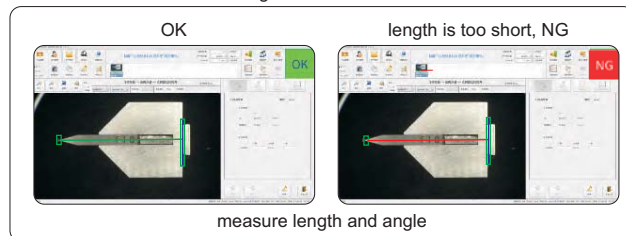
dimension measurement



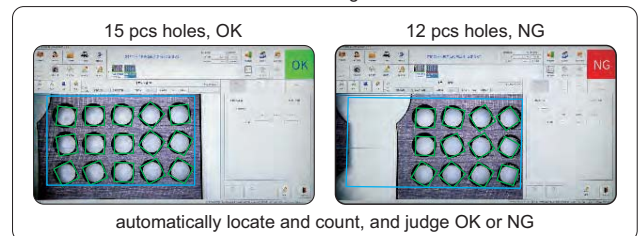
thread measurement



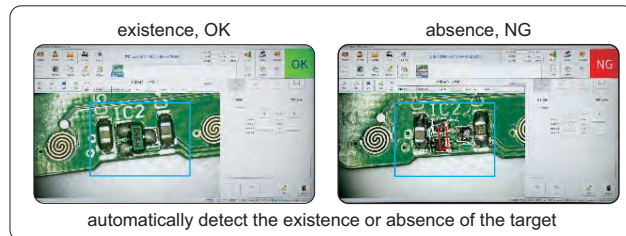
cutting tools measurement



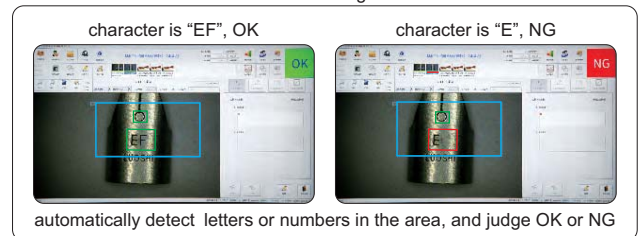
counting



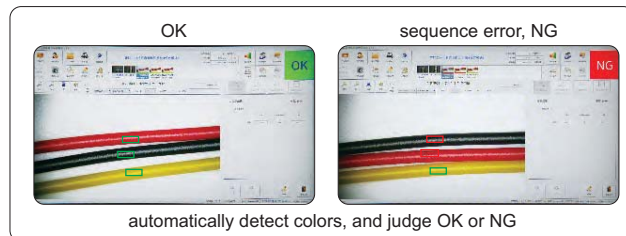
existence or absence



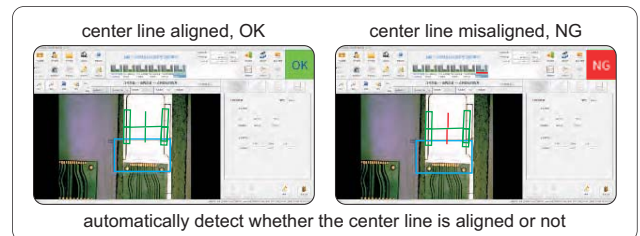
character recognition



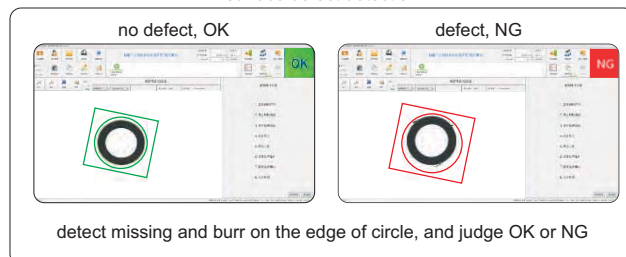
color detection



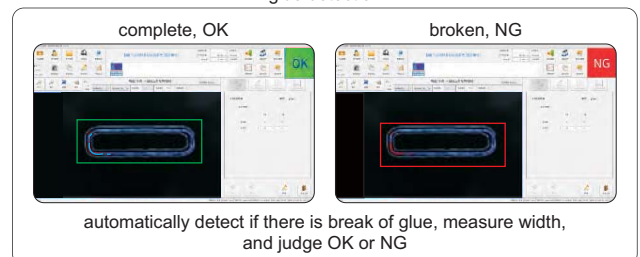
location detection



surface defect detection

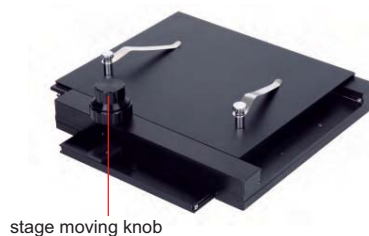


glue detection



X-Y METAL STAGE CODE ISM-DL-STAGE1

- Suitable for digital microscopes
ISM-DL300, ISM-DL301, 5303-AF103



SPECIFICATION

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

DUAL HEAD LED ILLUMINATION CODE ISM-ZS-LED

- Adjustable illumination
- For digital and stereo microscopes



application



SPECIFICATION

Power	3W
Power supply	100~240V
Working	10000h
Illumination	10000lux

LED AUXILIARY ILLUMINATION CODE ISM-DL-LED

- Suitable for digital microscopes
ISM-DL300, ISM-DL301, ISM-DL302,
ISM-DL400, 5303-AF103



illumination direction and brightness are adjustable

SPECIFICATION

Power	8W
Diameter of mounting hole	Ø25mm
Power supply	10~12V, 0~300mA

COAXIAL LIGHT ILLUMINATION CODE ISM-DL-COAXIAL

- Suitable for digital microscopes
5303-AF103, ISM-DL300,
ISM-DL301, ISM-DL400



for smooth surfaces and small holes,
brightness is adjustable

SPECIFICATION

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

ATTENTION: PLEASE MAKE CONFOCAL ADJUSTMENT AFTER
CHANGING CAMERA ADAPTERS OR AUXILIARY OBJECTIVES

AUXILIARY OBJECTIVES

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



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 (ISM-DL300, ISM-DL301)

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	25.6×16.8~5×3.5mm	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

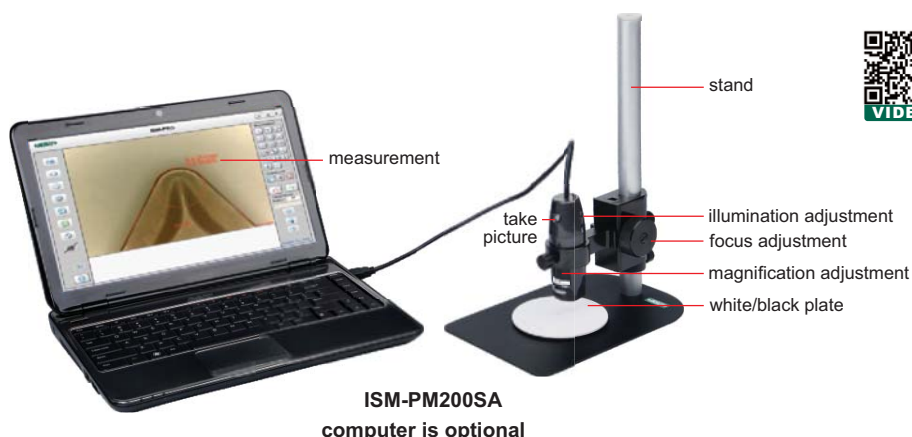
- Suitable for digital microscopes 5303-AF103,
ISM-DL300, ISM-DL301, ISM-DL400

^{*} For auxiliary objectives 0.3X, 0.5X, 0.75X, use contour illumination of ISM-DL301 or LED auxiliary illumination (code ISM-DL-LED)

DIGITAL MEASURING MICROSCOPES



- Can take pictures and videos
- Supplied with software



SPECIFICATION

Code	ISM-PM200SA	ISM-PM200SB	ISM-PM600SA
Magnification	10X~200X	10X~200X	450X~600X
Focus distance	short focus distance	short focus distance	short focus distance
Stand	standard	universal	standard
Focus support	included	included	not included
Calibration rule	graduation 0.1 and 1mm	graduation 0.1 and 1mm	graduation 0.1mm
Pixel	2M (resolution: 1600×1200)		
Illumination	built-in adjustable LED		
Power supply	USB 2.0 cable (voltage required: 5±0.1V)		



OPTIONAL ACCESSORY

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

MAGNIFICATION, FOCUS DISTANCE, VIEW FIELD AND ACCURACY

ISM-PM200SA/ISM-PM200SB			
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

ISM-PM600SA			
Magnification	Focus distance	View field	Accuracy
450X	1.4mm	0.85×0.67mm	6μm
500X	5.5mm	0.76×0.61mm	6μm
550X	8.6mm	0.69×0.55mm	5μm
600X	11.5mm	0.63×0.51mm	5μm

17

universal stand (included in ISM-PM200SB)

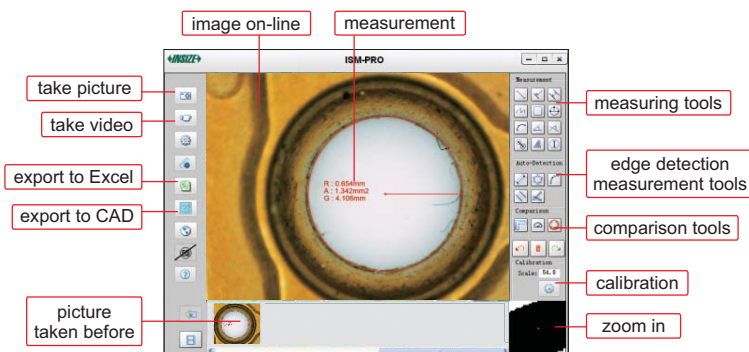


software CD (included)



SOFTWARE

- **Language:** English, Japanese, Korean, German, Turkey, Portuguese, Chinese
- **Operation system:** Windows 7/8/XP/Vista



To be continued

Continued from previous page

Measuring tools:

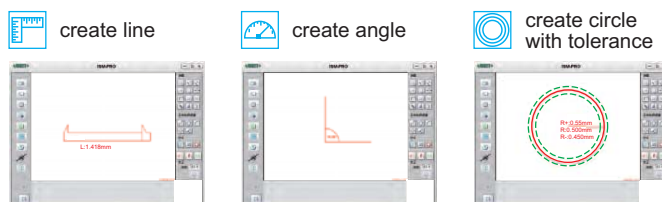
- | | | | | | |
|--|---|--|--|--|---|
| | measure length of line or distance between two points | | measure distance between point and line | | measure length of continuous line |
| | measure area of rectangle | | measure radius, length and angle of arc | | measure distance between two parallel lines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

Edge detection measurement tools:

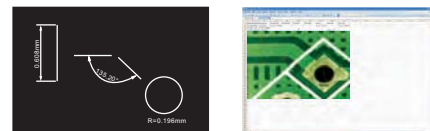
- | | | | |
|--|--|--|---|
| | detect two parallel lines automatically and calculate distance | | detect two lines automatically, and calculate angle |
| | detect circle automatically, and calculate radius, girth and area | | detect line automatically, and calculate length |
| | detect arc automatically,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

Comparison tools:

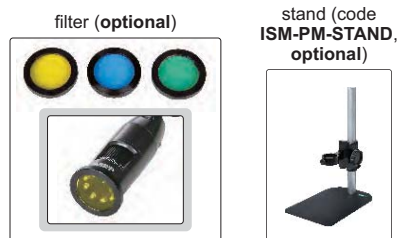
Create line, angle or circle with desired size, to compare with workpieces



Data export to CAD or Excel:



ATTENTION: NOT FOR MEASUREMENT, NOT SUITABLE FOR COMPUTERS



- Connected to TV directly
- For observation, cannot take pictures and videos

SPECIFICATION

Code	ISM-TV200	ISM-TV200W
Type	with wire	wireless (maximum transmission distance 5m)
Magnification	10X~200X (on 17" TV)	
Pixel	0.35M	
Illumination	adjustable brightness LED	
Focus	supplied with focus ring, stand (ISM-PM-STAND) is optional	
Power supply	DC	built-in rechargeable battery

MAGNIFICATION, FOCUS DISTANCE AND VIEW FIELD

ISM-TV200			ISM-TV200W		
Magnification	Focus distance	View field	Magnification	Focus distance	View field
50X	21mm	8.1×6.4mm	60X	19mm	6.9×5.2mm
100X	13mm	3.9×3.1mm	80X	16mm	5.0×3.8mm
150X	16mm	2.6×2.1mm	150X	16mm	2.6×2.1mm
200X	19mm	1.8×1.5mm	200X	19mm	1.8×1.5mm

TV DIGITAL MICROSCOPES



ISM-TV200 (with wire)

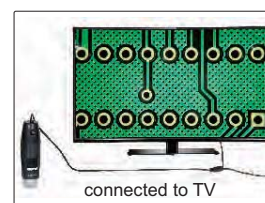


ISM-TV200W (wireless)



OPTIONAL ACCESSORY

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



WiFi DIGITAL MEASURING MICROSCOPE 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



stand (code ISM-PM-STAND, optional)

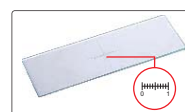
software CD (included)



filter (optional)



plastic calibration rule (graduation 1mm, included)



glass calibration rule (graduation 0.1mm, included)

SPECIFICATION

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



connected to iPad by WiFi



connected to Android device by WiFi



connected to computer by WiFi



connected to computer by USB cable

STANDARD DELIVERY

Microscope	1 pc
Focus support ring for 80X/150X	1 pc
Focus support ring for 60X/200X	1 pc
Glass calibration rule (graduation 0.1mm)	1 pc
Plastic calibration rule (graduation 1mm)	1 pc
USB cable and software	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

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

1 Software ISM-PAD (for iPad by WiFi)



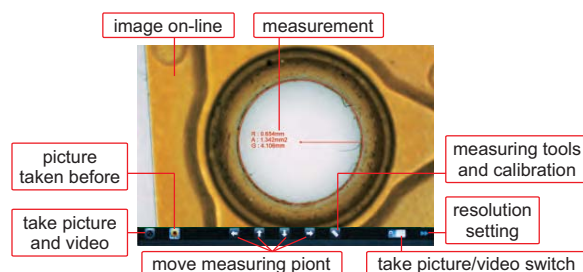
measure length of line or distance between two points



measure angle



measure radius, girth and area of circle with three points

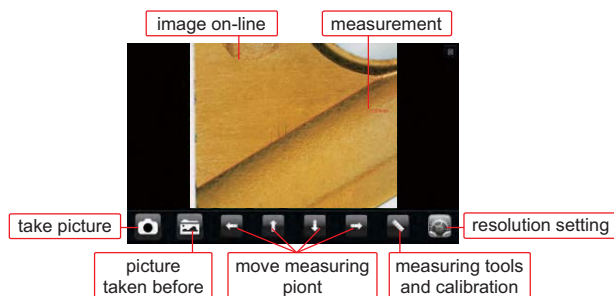


To be continued

Continued from previous page

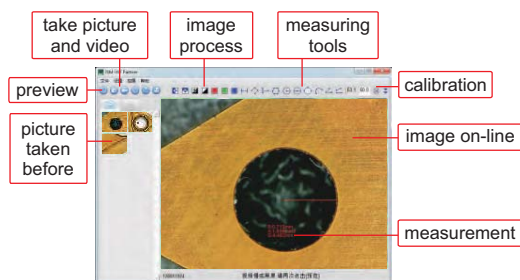
2 Software ISM-APK (for Android devices by WiFi)

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



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

Measuring tools:

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

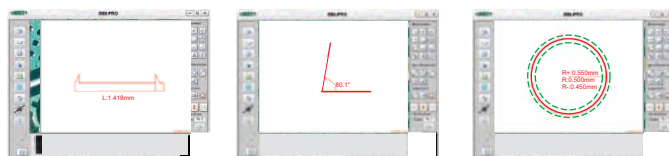
Edge detection measurement tools:

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

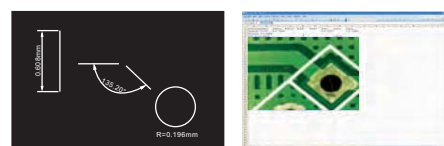
Comparison tools:

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

- | | | |
|-------------|--------------|------------------------------|
| create line | create angle | create circle with tolerance |
|-------------|--------------|------------------------------|



Data export to CAD or Excel:



INDUSTRIAL MICROSCOPES



5101-M500

- Infinite optical system, polarization observation, dark field observation
- Kohler illumination system provides uniform illumination field
- Objective 50X is spring type

SPECIFICATION

Code	5101-M500** (bright field objectives)				5101-M500BD** (bright & dark field objectives)			
Illumination	6V/30W halogen lamp, brightness is adjustable				12V/50W halogen lamp, brightness is adjustable			
Objective (infinite plan achromatic)	bright field objectives				bright & dark field objectives			
	5X	10X	20X	50X	5X	10X	20X	50X
Working distance	26.1mm	20.2mm	8.80mm	3.68mm	9.70mm	9.30mm	7.23mm	2.50mm
Numerical aperture	0.12	0.25	0.40	0.70	0.12	0.25	0.40	0.70
Magnification	50X~500X							
Eyepiece (wide field)	10X (view field: Ø22mm)							
Stage	double layer							
	size: 160×140mm							
	travel: 35×30mm							
Pupil distance	53~75mm							
Diopter adjustment	±5 diopter (one eyepiece)							
Power supply	220V, 50/60Hz **							
Dimension (L×W×H)	415×345×380mm							
Weight	14kg							

** Add "-U" on code No. when power supply is 110V, 50/60Hz

STANDARD DELIVERY

Main unit	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

Bright & dark field objective (for 5101-M500BD)	PL40X	5101-M-BD40X
	PL60X	5101-M-BD60X
	PL80X	5101-M-BD80X
	PL100X	5101-M-BD100X
10X dividing eyepiece (0.1mm/div.)		5101-M-EPD10X

Bright field objective (for 5101-M500)	PL40X	5101-M-OB40X
	PL60X	5101-M-OB60X
	PL80X	5101-M-OB80X
	PL100X	5101-M-OB100X
Digital camera		ISM-CM20, ISM-CM63, ISM-ZS70-S
Camera adapter *		5101-M-ADAPTER

* Digital camera must be used with camera adapter

INDUSTRIAL INSPECTION MICROSCOPE (LARGE STAGE) CODE 5104-M700**



- For observation and inspection of large IC and chip in IT industry

SPECIFICATION

Magnification	40X~400X			
Eyepiece (wide field)	10X (view field: Ø22mm)			
Objective (plan achromatic)	4X	10X	20X	40X
Numerical aperture	0.10	0.25	0.40	0.60
Working distance	17.8mm	10mm	5.8mm	2.9mm
Stage	double layer, size: 300×268mm, travel: 250×200mm			
Kohler illumination	6V/20W halogen lamp, brightness is adjustable built-in green, blue, yellow and frosted glasses			
Pupil distance	48~75mm			
Diopter adjustment	±5 diopter (two eyepieces)			
Power supply	220V, 50/60Hz **			
Dimension (L×W×H)	647×268×376mm			
Weight	12kg			

** Add "-U" on code No. when power supply is 110V, 50/60Hz

STANDARD DELIVERY

Main unit	1 pc
Camera connector	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

Bright field objective	2.5X plan achromatic objective (focus distance: 11.7mm)	5104-M700-OB2.5X
	5X plan achromatic objective (focus distance: 15.5mm)	5104-M700-OB5X
	50X plan achromatic objective (focus distance: 0.32mm)	5104-M700-OB50X
	100X plan achromatic objective (focus distance: 2mm)	5104-M700-OB100X
Polarizer and analyzer	5104-M700-AP	
Digital camera	ISM-CM20, ISM-CM63, ISM-ZS70-S	
Camera adapter 0.5X *	ISM-MAS-ADAPTER	

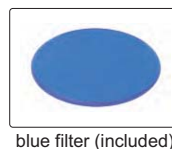
* Digital camera must be used with camera adapter

METALLURGICAL MICROSCOPES



5102-M600

- Infinite optical system, observation in reflected or transmitted illumination, polarizing observation
- Kohler illumination system provides uniform illumination field
- Objectives 40X, 60X are spring type



SPECIFICATION

Code	5102-M600** (bright field objectives)				5102-M600BD ** (bright & dark field objectives)			
Illumination	6V/30W (transmitted)		6V/30W (reflected)		12V/30W (transmitted)		12V/50W (reflected)	
Objective (infinite plan achromatic)	bright field objectives				bright & dark field objectives			
	5X	10X	40X	60X	5X	10X	20X	40X
Working distance	26.1mm	20.2mm	3.98mm	3.18mm	9.70mm	9.30mm	7.20mm	3.00mm
Numerical aperture	0.12	0.25	0.60	0.70	0.12	0.25	0.40	0.70
Magnification	50X~600X				50X~400X			
Eyepiece (wide field)	10X (view field: Ø22mm)							
Stage	double layer							
	size: 210×140mm							
	travel: 75x50mm							
Pupil distance	53~75mm							
Diopter adjustment	±5 diopter (one eyepiece)							
Power supply	220V, 50/60Hz **							
Dimension (L×W×H)	456×260×498mm							
Weight	11kg							

** Add "-U" on code No. when power supply is 110V, 50/60Hz

STANDARD DELIVERY

Main unit	1 pc
Anti-dust cover	1 pc
Filter (blue/frosted glass)	1 pc of each

OPTIONAL ACCESSORY

Bright & dark field objective (for 5102-M600BD)	PL50X	5101-M-BD50X
	PL60X	5101-M-BD60X
	PL80X	5101-M-BD80X
	PL100X	5101-M-BD100X
10X dividing eyepiece (0.1mm/div.)		5101-M-EPD10X

Bright field objective (for 5102-M600)	PL20X	5101-M-OB20X
	PL50X	5101-M-OB50X
	PL80X	5101-M-OB80X
	PL100X	5101-M-OB100X
Digital camera		ISM-CM20, ISM-CM63, ISM-ZS70-S
Camera adapter *		5101-M-ADAPTER

* Digital camera must be used with camera adapter

METALLURGICAL MICROSCOPES



5103-M1000

- Infinite optical system, polarization observation
- Kohler illumination system provides uniform illumination field
- Objectives 50X, 100X are spring type

SPECIFICATION

Code	5103-M1000** (bright field objectives)				5103-M1000BD** (bright & dark field objectives)			
Illumination	6V/30W halogen lamp, brightness is adjustable				12V/50W halogen lamp, brightness is adjustable			
Objective (infinite plan achromatic)	bright field objectives				bright & dark field objectives			
	10X	20X	50X	100X	5X	10X	20X	50X
Working distance	20.2mm	8.80mm	3.68mm	0.40mm	9.70mm	9.30mm	7.23mm	2.50mm
Numerical aperture	0.25	0.40	0.70	0.85	0.12	0.25	0.40	0.70
Magnification	100X~1000X				50X~500X			
Eyepiece (wide field)	10X (view field: Ø22mm)							
Stage	double layer							
	size: 242×200mm							
	travel: 30x30mm							
Pupil distance	53~75mm							
Dioptr adjustment	±5 diopter (one eyepiece)							
Power supply	220V, 50/60Hz **							
Dimension (L×W×H)	614×250×394mm							
Weight	13kg							

** Add “-U” on code No. when power supply is 110V, 50/60Hz

STANDARD DELIVERY

Main unit	1 pc
Polarizer and analyzer	1 pc of each
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

Bright & dark field objective (for 5103-M1000BD)	PL40X	5101-M-BD40X
	PL60X	5101-M-BD60X
	PL80X	5101-M-BD80X
	PL100X	5101-M-BD100X
10X dividing eyepiece (0.1mm/div.)		5103-M-EPD10X

Bright field objective (for 5103-M1000)	PL5X	5101-M-OB5X
	PL40X	5101-M-OB40X
	PL60X	5101-M-OB60X
	PL80X	5101-M-OB80X
Digital camera		ISM-CM63
Camera adapter *		5101-M-ADAPTER

* Digital camera must be used with camera adapter

PARALLEL LIGHT STEREO MICROSCOPE CODE ISM-ZS200



VIDEO



- Infinity parallel optical system and 20° inclined optical tube reduce fatigue
- Coaxial illumination is optional for deep holes which cannot be observed by ring light
- Aperture diaphragm is optional for large depth of field and high quality image

SPECIFICATION

Optical tube	binocular (20° inclined)
Eyepiece (wide field)	10X (view field: Ø22mm)
Objective	0.8X~8X (zoom)
Zoom ratio	1:10
Pupil distance	55~75mm
Diopter adjustment	±5 diopter (both eyepieces)
Working distance of objective	78mm
Max. workpiece height	72mm
Illumination	adjustable reflected and transmitted LED light
Power supply	110/220V, 50/60HZ
Dimension (L×W×H)	240×280×440mm
Weight	4.3kg

OPTIONAL ACCESSORY

Objective	0.5X achromatic objective (focus distance: 186mm)	ISM-ZS200-OB05X *
	2X plan achromatic objective (focus distance: 32.5mm)	ISM-ZS200-OB2X
	0.5X plan apochromatic objective (focus distance: 126mm)	ISM-ZS200-APO05X *
Eyepiece	WF15X (view field: Ø16mm)	ISM-ZS200-EP15X
	WF20X (view field: Ø12mm)	ISM-ZS200-EP20X
	WF30X (view field: Ø20mm)	ISM-ZS200-EP30X
Sleeve for objective		ISM-ZS30-ADAPTER
Iris diaphragm		ISM-ZS200-IRD
Optical path splitter		ISM-ZS200-OBS
Coaxial illumination		ISM-ZS200-COAXIAL
Digital camera **		ISM-CM20, ISM-CM63

* 0.5X achromatic objective must be used with sleeve **ISM-ZS30-ADAPTER**

** Digital camera must be used with optical path splitter

PARALLEL LIGHT PATH: REDUCE FATIGUE,
ACCESSORIES CAN BE ADDED INTO LIGHT PATH

coaxial illumination (optional)



optical path splitter (optional)



iris diaphragm (optional)



STANDARD DELIVERY

Main unit	1 pc
WF 10X eyepiece	2 pcs
Ø100mm glass plate	1 pc
Ø100mm white/black plate	1 pc
Anti-dust cover	1 pc

**LARGE ZOOM
RATIO**

ZOOM STEREO MICROSCOPES (ADVANCED TYPE)



LED ring light (optional)



ISM-ZS100T

SPECIFICATION

Code	ISM-ZS100	ISM-ZS100T
Optical tube	binocular	trinocular
Eyepiece (wide field)	10X (view field: Ø23mm)	
Objective	0.6X~5X (zoom)	
Zoom ratio	1:8.3	
Pupil distance	55~75mm	
Diopter adjustment	±5 diopter (two eyepieces)	
Working distance of objective	115mm	
Max. workpiece height	75mm	
Illumination	adjustable reflected and transmitted LED light	
Power supply	110/220V, 50/60HZ	
Dimension (L×W×H)	260×310×490mm	
Weight	4.9kg	

STANDARD DELIVERY

Main unit	1 pc
Digital camera adapter 0.55X for ISM-ZS100T	1 pc
WF10X eyepiece	2 pcs
Ø100mm glass plate	1 pc
Ø100mm white/black plate	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

Auxiliary objective	0.5X (focus distance: 220mm)	ISM-ZS100-OB05X *
	0.7X (focus distance: 125mm)	ISM-ZS100-OB07X
	2X (focus distance: 45mm)	ISM-ZS100-OB2X
Eyepiece	WF15X (view field: Ø16mm)	ISM-ZS100-EP15X
	WF20X (view field: Ø12mm)	ISM-ZS100-EP20X
	WF30X (view field: Ø8mm)	ISM-ZS100-EP30X
Sleeve for auxiliary objective		ISM-ZS30-ADAPTER
LED ring light		ISM-ZS-RL
Digital camera adapter 1X for ISM-ZS100T		ISM-ZS100-DA
Digital camera for ISM-ZS100T		ISM-CM20, ISM-CM63, ISM-ZS70-S

* 0.5X auxiliary objective must be used with sleeve **ISM-ZS30-ADAPTER**

ZOOM STEREO MICROSCOPES (STANDARD TYPE)



ISM-ZS50

SPECIFICATION

Code	ISM-ZS50	ISM-ZS50T
Optical tube	binocular	trinocular
Eyepiece (wide field)	10X (view field: Ø22mm)	
Objective	0.8X~5X (zoom)	
Zoom ratio	1:6.3	
Pupil distance	55~75mm (adjustable)	
Diopter adjustment	±5 diopter (two eyepieces)	
Working distance of objective	115mm	
Max. workpiece height	215mm	
Illumination	adjustable reflected and transmitted LED light	
Power supply	110/220V, 50/60HZ	
Dimension (L×W×H)	290×260×480mm	
Weight	4.9kg	

STANDARD DELIVERY

Main unit	1 pc
WF 10X eyepiece	2 pcs
Ø100mm glass plate	1 pc
Ø100mm white/black plate	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

Auxiliary objective	0.5X	ISM-ZS50-OB05X*
	2X	ISM-ZS50-OB2X
Eyepiece	10X dividing eyepiece (graduation 0.1mm/div.)	ISM-ZS50-EPD10X
	WF15X (view field: Ø16mm)	ISM-ZS50-EP15X
	WF20X (view field: Ø12mm)	ISM-ZS50-EP20X
LED ring light		ISM-ZS-RL
Sleeve for auxiliary objective		ISM-ZS30-ADAPTER
Digital camera for ISM-ZS50T		ISM-CM20, ISM-CM63, ISM-ZS70-S
Camera adapter 0.5X for ISM-ZS50T **		ISM-MAS-ADAPTER

* 0.5X auxiliary objective must be used with ISM-ZS30-ADAPTER

** Digital camera must be used with camera adapter 0.5X



SPECIFICATION

Optical tube	binocular
Eyeiece (wide field)	10X (view field: Ø20mm)
Objective	1X~4.5X (zoom)
Zoom ratio	1:4.5
Pupil distance	55~75mm (adjustable)
Diopter adjustment	±5 diopter (two eyepieces)
Working distance of objective	97mm
Max. workpiece height	147mm
Illumination	adjustable reflected and transmitted LED light
Power supply	110/220V, 50/60HZ
Dimension (L×W×H)	260×190×400mm
Weight	4.3kg

ZOOM STEREO MICROSCOPE (BASIC TYPE) CODE ISM-ZS30



LED ring light (optional)

STANDARD DELIVERY

Main unit	1 pc
WF 10X eyepiece	2 pcs
Ø95mm glass plate	1 pc
Ø95mm white/black plate	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

Auxiliary objective	0.5X	ISM-ZS30-OB05X *
	0.63X	ISM-ZS30-OB06X *
	0.75X	ISM-ZS30-OB07X *
	2X	ISM-ZS30-OB2X
Eyepiece	10X dividing eyepiece (graduation 0.1mm/div.)	ISM-ZS30-EPD10X
	WF15X (view field: Ø16mm)	ISM-ZS50-EP15X
	WF20X (view field: Ø12mm)	ISM-ZS50-EP20X
LED ring light		ISM-ZS-RL
Sleeve for auxiliary objective		ISM-ZS30-ADAPTER
Digital camera		ISM-CM63
Camera adapter 0.75X **		ISM-AD-0D75

* 0.5X, 0.63X and 0.75X auxiliary objectives must be used with ISM-ZS30-ADAPTER

** Digital camera must be used with camera adapter 0.75X

LONG WORKING DISTANCE STEREO MICROSCOPE (LOW MAGNIFICATION) CODE 5305-ZS80

SPECIFICATION

Magnification	8X
Eyeiece (wide field)	10X (view field: Ø20mm)
Objective	0.8X
Pupil distance	55~75mm
Diopter adjustment	±5 diopter (one eyepiece)
Working distance of objective	115mm
Max. workpiece height	100mm
Dimension (L×W×H)	280x160x370mm
Weight	3.7kg

STANDARD DELIVERY

Main unit	1 pc
10X eyepieces	1 pair
0.8X objective	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

Eyepiece	WF5X (view field: Ø20mm)	5305-ZS80-EP5X
	WF15X (view field: Ø15mm)	5305-ZS80-EP15X
	WF20X (view field: Ø10mm)	5305-ZS80-EP20X
LED ring light		ISM-ZS-RL



LED ring light (optional)



POLARIZING MICROSCOPE CODE ISM-POL1000



- Widely used in geology, mineralogy, fossil fuel exploration
- Single polarization, orthogonal polarization or conoscopic observation are available



SPECIFICATION

Magnification	40X~600X				
Eyepiece	10X (view field: Ø20mm)				
Infinite strain free plan achromatic objective	4X (transmitted/reflected)	10X (transmitted/reflected)	20X (transmitted)	40X (transmitted)	60X (transmitted)
Working distance	22.2mm	6.1mm	6.4mm	0.6mm	0.3mm
Numerical aperture	0.1	0.25	0.4	0.65	0.8
Stage	revolving round stage diameter: Ø160mm graduation: 1°, resolution: 6'				
Pupil distance	53~75mm				
Diopter adjustment	±5 diopter (one eyepiece)				
Illumination	12V/50W halogen lamp, brightness is adjustable (reflected illumination) 12V/20W halogen lamp, brightness is adjustable (transmitted illumination)				
Power supply	110/220V, 50/60HZ				
Dimension (L×W×H)	614×250×394mm				
Weight	13kg				

STANDARD DELIVERY

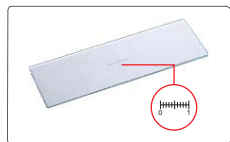
Main unit	1 pc
Micrometer	1 pc
Grid plate	1 pc
10X crossing eyepiece (view field: Ø20mm)	1 pc
10X dividing eyepiece (view field: Ø20mm, graduation 0.1mm)	1 pc
λ slip (first class red) and 1/4λ slip	1 pc
Quartz wedge	1 pc

OPTIONAL ACCESSORY

Objective for reflected system	PL20X	ISM-POL1000-OBR20X
	PL40X	ISM-POL1000-OBR40X
	PL60X	ISM-POL1000-OBR60X
	PL100X	ISM-POL1000-OBR100X
Objective for transmitted system	PL100X	ISM-POL1000-OBT100X
Specimen presser		ISM-POL1000-SP

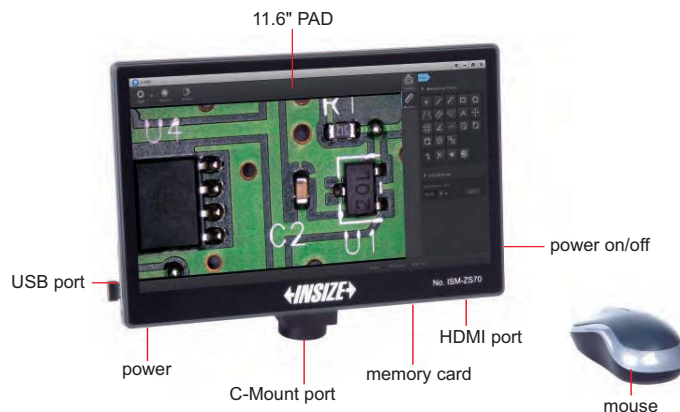
ATTENTION: CAMERA CONNECTOR AND ADAPTER ARE NEEDED ACCORDING TO MICROSCOPES

MEASUREMENT, TAKE PICTURES AND VIDEOS

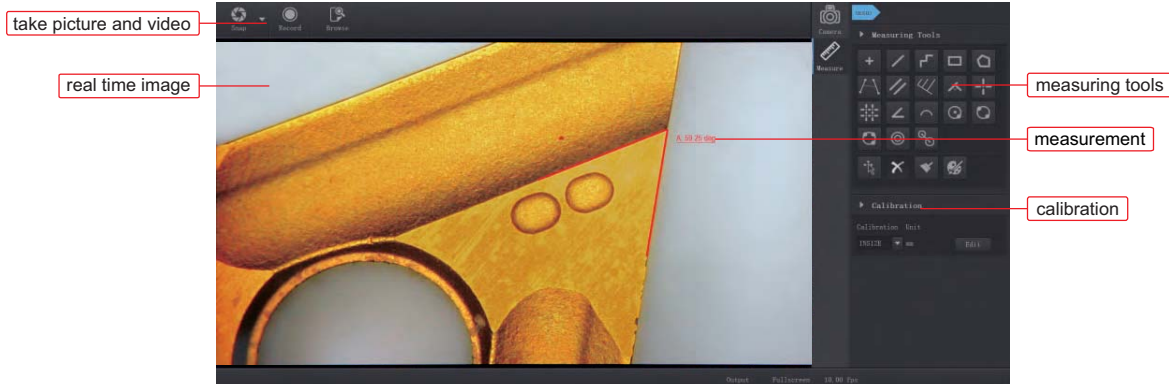


glass calibration rule (included, graduation 0.1mm)

- Windows 10 operation system
- 1080P high-definition image
- Take pictures and videos
- Measuring accuracy $\pm 0.01\text{mm}$
- Language: Chinese, English, Japanese, Korean, Russian
- Automatic white balance and exposure
- Brightness, contrast ratio, gain are adjustable



software (included)



Measuring tools

- | | | | | | |
|--|---|--|---|--|--|
| | measure length of line or distance between two points | | measure distance between two parallel lines | | measure distance between multiple parallel lines |
| | measure length of continuous line | | measure area of rectangle | | measure area of polygon |
| | measure distance between point and line | | measure angle with three points | | measure length of arc |
| | measure radius with three points | | measure radius of concentric circles | | measure distance between two circles |

SPECIFICATION

Sensor	1/2.3" CMOS
Pixel	2M
Resolution	1024×768, 1280×720, 1280×1024, 1600×1200, 1920×1080
Frame rate	30fps (1920×1080)
Memory	4G
Output	HDMI/USB 2.0
Power supply	power adapter
Dimension (L×W×H)	280×53×253mm
Weight	1.5kg

STANDARD DELIVERY

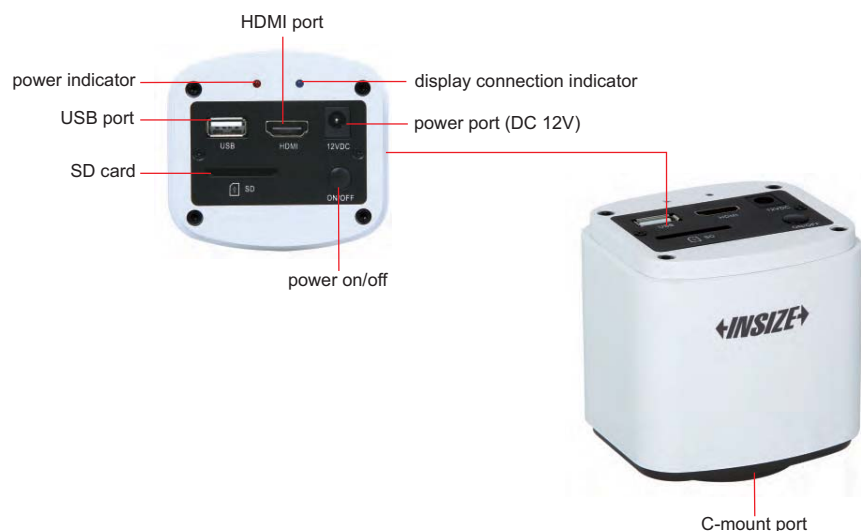
Main unit	1 pc
Mouse	1 pc
Glass calibration rule (graduation 0.1mm)	1 pc
AC/DC adapter	1 pc

DIGITAL CAMERA FOR MICROSCOPES CODE ISM-CM20

ATTENTION: ADAPTERS ARE NEEDED
ACCORDING TO MICROSCOPES

FOCUS
STACKING

AUTOMATIC IMAGE
STITCHING



adapter 0.5X (optional)



- 1080P high-definition image
- Can be connected with displays or computers
- Built-in simple measuring software for displays, without computer
- Professional measuring software for computers is included
- For bright field, dark field or fluorescent field
- Automatic exposure, white balance, gain adjustment, gamma correction, brightness contrast adjustment, saturation adjustment, chroma sharpness adjustment
- Focus stacking, automatic image stitching

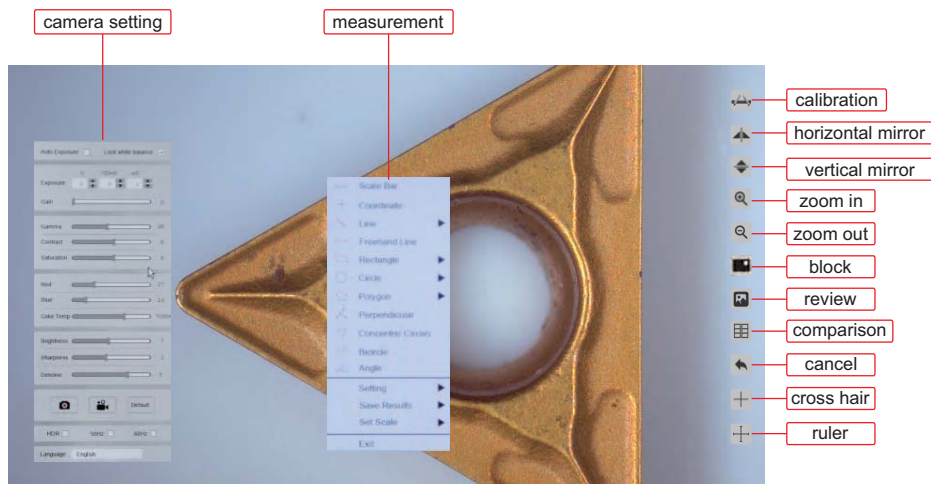
application



17 SIMPLE MEASURING SOFTWARE (BUILT-IN, FOR DISPLAYS)

Measuring tools:

- measure length of line or distance between two points
- measure distance between point and line
- measure rectangle
- measure concentric circles
- measure circle
- measure curve
- measure polygon
- measure center distance of two circles
- measure angle of two lines



Auto exposure, white balance, gain adjustment, gamma, chroma contrast adjustment, brightness sharpness adjustment, size measurement

To be continued

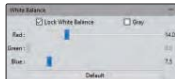
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PROFESSIONAL MEASURING SOFTWARE (INCLUDED, FOR COMPUTERS)

selectable resolution



white balance
(balance color based on actual light source)



histogram
(quantify the distribution of color and brightness)

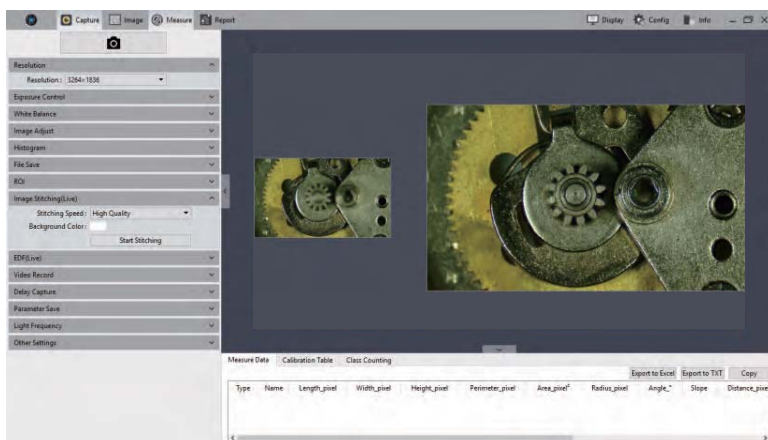
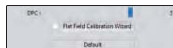


Image coloring, fluorescence synthesis, binary, image smoothing, color filter/color extraction/color inversion, delay capture, focus stacking, automatic image stitching, metrics flow, manual counting, dynamic and static measurement, layered measurement, report generation and printing, delay record, flat field correction, image adjustment, histogram.

flat field correction



metrics flow
(create templates, set tolerances and build metrics flow)



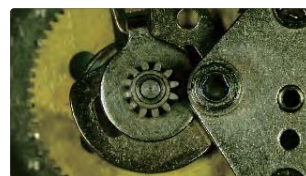
manual counting
(class counting)



focus on the top



focus on the bottom



clear image of both top and bottom

focus stacking



automatic image stitching

slowly move the workpiece to generate a stitched image automatically (this image can not be used for size measurement)

SPECIFICATION

Sensor	1/2.8" CMOS
Pixel	2M
Resolution	1920×1080
Frame rate	30fps
Power supply	power adapter
Output	HDMI/USB
Lens connection	C-mount

COMPUTER (optional) REQUIREMENT

Operation system	Windows 7/8/10 (64 bit)
CPU	Intel Core i5 or above
Memory	8GB or above
USB port	USB 3.0

DISPLAY (optional) REQUIREMENT

Size	13" or above
Resolution	1080P or above
HDMI port	TYPE A

STANDARD DELIVERY

Main unit	1 pc
16G memory card and holder	1 pc
Mouse	1 pc
HDMI cable	1 pc
USB cable	1 pc
Power supply	1 pc

OPTIONAL ACCESSORY

Adapter 0.5X	ISM-MAS-ADAPTER
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DIGITAL CAMERA FOR MICROSCOPES CODE ISM-CM63

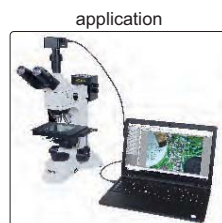


ATTENTION: ADAPTERS ARE NEEDED
ACCORDING TO MICROSCOPES

- To be used with computers
- Sony Exmor back-illuminated CMOS sensor
- USB3.0 transfer
- Automatic exposure, gain adjustment, white balance, chrominance adjustment, saturation adjustment, gamma correction, luminance adjustment, contrast adjustment



C-mount port

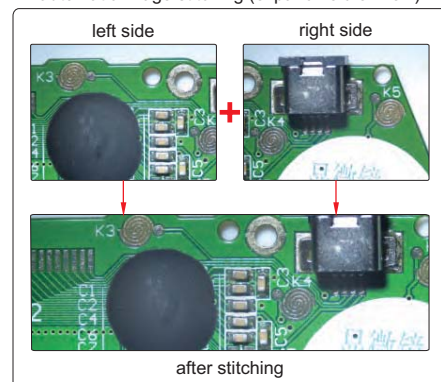


application

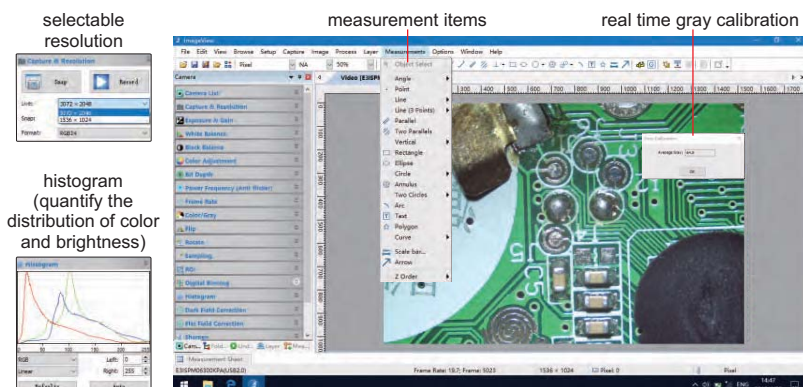


adapter 0.75X (optional)

automatic image stitching (expand field of view)



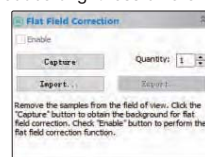
software (included)



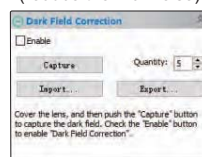
black balance
(reduce color difference)



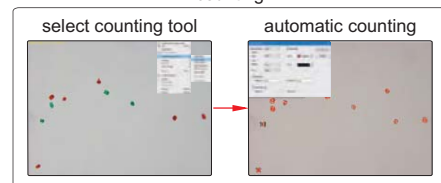
flat field correction
(reduce brightness difference)



dark field correction
(reduce thermal noise)



counting



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

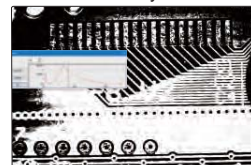
focus stacking



Measuring tools:

- | | |
|---|--|
| measure length of line or distance between two points | measure rectangle |
| measure distance between two parallel lines | measure width and diameter of ring |
| measure angle | measure diameter, length, perimeter angle of arc |
| measure radius, girth and area of circle | measure area of polygon |
| measure axis lengths, girth and area of ellipse | measure center distance between two circles |
| calibration | measure length of open curve |

Binary



separate target and background

3D plot



Visualize the distribution of image brightness and color

To be continued

Continued from previous page

SPECIFICATION

Sensor (back-up)	1/1.8" CMOS
Resolution	6.3M
Pixel	3072×2048
Single pixel size	2.4×2.4μm
Spectral range	380-650nm (with infrared cut filter)
Frame rate	30fps
Sampling average	1×1
Exposure time	0.1ms~15s
Power supply	USB port
Weight	400g

STANDAER DELIVERY

Camera (USB cable included)	1 pc
Software	1 pc

COMPUTER REQUIREMENT

Operation system	Windows/7/8/10
CPU	Intel Core 2 2.8Hz or above
Memery	2GB or above
USB port	USB3.0 (recommand) or USB2.0
Display	17" or above

OPTIONAL ACCESSORY

Adapter 0.75X	ISM-AD-0D75
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SMART CAMERA CODE ISM-MV10



- Built-in software, operated by mouse.
- Automatically calculate, store the test results and export to Excel.
- Camera with PLC control input and output interface, can be integrated with automation equipment.
- Functions: presence or absence of objects, position tilt correction, object counting, color detection, stain detection, dimension measurement, position guide, etc.

SPECIFICATION

Chip structure	FPGA+ARM
Opreating system	Linux 3.10
Kernel structure	dual-core Cortex-A9
Frequency	1GHZ
I/O port	3 sets of input and output (can be connected to photoelectric switch, wire switch, PLC, etc.)
Working temperature	-10~70°C
Sensor	1/2" CMOS
Single pixel size	3.75×3.75μm
Resolution	1920×1080
Frame rate	60fps
Video output	HDMI port
Lens connection	standard C port

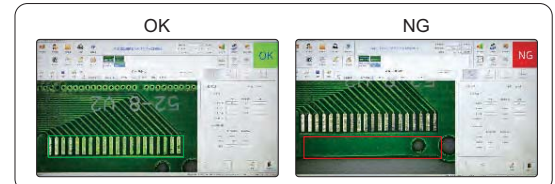
SOFTWARE

presence or absence of objects



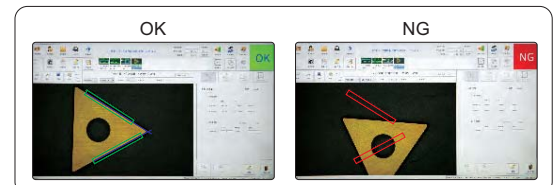
select the area and specify the target, the camera will automatically detect the presence or absence of the target.

automatic counting



select the area and specify the target, the camera will automatically calculate the number of targets.

dimension measurement



measuring angle, distance, radius, center distance, etc.

STANDAER DELIVERY

Camera (with HDMI cable)	1 pc
Software	1 pc

PORTABLE MEASURING MICROSCOPES



ISM-PM100

SPECIFICATION

Code	ISM-PM20	ISM-PM40	ISM-PM50	ISM-PM100
Total magnification	20X	40X	50X	100X
Eyeiece	10X with graduation	10X with graduation	10X with graduation	10X with graduation
Objective (achromatic)	2X (numerical aperture: 0.05)	4X (numerical aperture: 0.1)	5X (numerical aperture: 0.12)	10X (numerical aperture: 0.25)
Working distance	17.2mm	18mm	17.6mm	7mm
Graduation	0.05mm	0.025mm	0.02mm	0.01mm
Viewing field	Ø9mm	Ø4.5mm	Ø3.6mm	Ø1.8mm
Focus range	30mm			
Illumination	LED light			
Diameter of base	Ø63mm			
Height	210mm			
Weight	650g			

STANDARD DELIVERY

Main unit	1 pc
Pen light	1 pc
Battery (AAA)	2 pcs

TABLE MAGNIFIER WITH ILLUMINATION CODE 7517-3D

- Four steps brightness adjustment
- LED illumination, working life 20000h
- Resin lens

SPECIFICATION

Magnification	1.75X
Diopter	3D
Lens diameter	Ø125mm
Illumination	power: 3W, illumination: 260lm
Power supply	100~240V, 50~60Hz

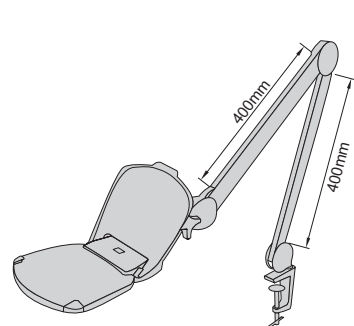


7517-3D

17

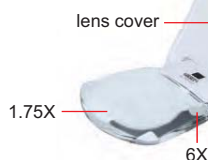
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TABLE MAGNIFIERS WITH ILLUMINATION



SPECIFICATION

Code	7520-320D	7521-3D
Magnification	two magnifications 1.75X/6X	1.75X
Diopter	3D/20D	3D
Lens dimension	160×127mm	Ø126mm
Illumination	power: 6W, illumination: 550lm	
Power supply	power adapter 12V, 1A	



clamping holder
(clamping range
10~60mm)

7520-320D



clamping holder
(clamping range
10~60mm)

7521-3D

- LED illumination, working life 20000h
- Resin lens