

METROLOGY[®]

Trinocular Metallurgical Microscope



Inverted Trinocular Metallurgical Microscope

*Stereo Image Microscope
(Zoom)*



Trinocular Metallurgical Microscope



Tool Microscopes

■ 3D Stereo Image Microscope (Zoom)



Technical specifications

Optical system

Total magnification: 3.3X-147X, Zoom body with detents: 0.7X-4.5X, Ratio: 1:6.5, stereo optic observation unit: 35° view angle attachment with 0.75X objective lens, internal LED ring light and laser position indicator. Optional objective lens: 0.3X, 0.5X, 0.75X, 1X, 1.5X, 2X.

8" LCD display

Resolution: 800*600, max: 1024*768, contrast: 300:1, visible angle: 150°, reaction time: ≤ 25 ms, brightness: 250cd/m² with BNC/S-video output

Modular Base

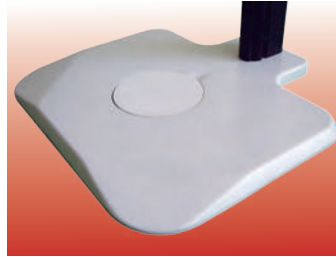
Φ90 non-illumination track slide base, track slide column height: 330mm, fine adjustable focus: 200mm.



■ 3D Stereo Image Microscope (Zoom)



OP-SM9000



Base



Focus adjustment wheel



3D Stereo reflecting mirror



Laser positioner



Objective lens



Optical lens and circular LED light



8" LCD display



Image device



OP-SM9000

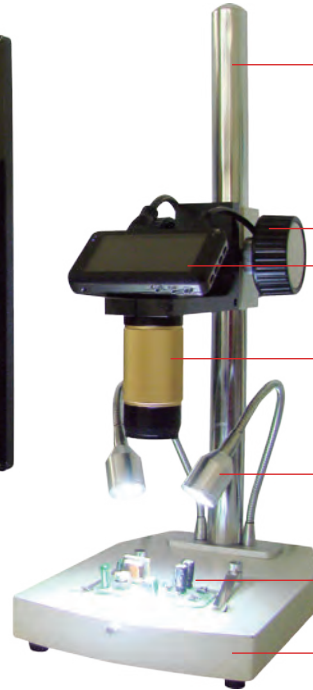
■ HDMI Digital Microscope



OP-HDMI300



Optional: HDMI monitor & TF card



Φ25 *L400mm
Chrome steel column

Adjustment knob
LCD monitor

Zoom continuous
magnification &
focus lens

LED dual spot light

Observation workpiece

Stage

OP-HDMI300H

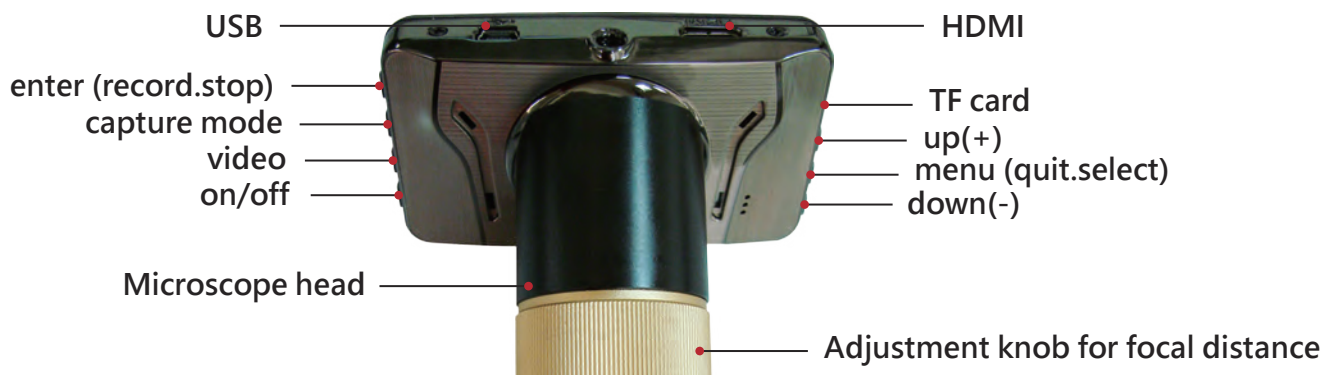
Specifications:

Model No	OP-HDMI300	OP-HDMI300H
Image Sensor	Real 3.0M Pixels	
LCD Display	3"	
Still Image	12M/10M/8M/5M/3M/2M/1.3M/VGA	
Video	1920X1080 (1080P), 1280X720 (720P), 848X480 (WVGA), 640X480 (VGA)	
Focusing Range	30mm-500mm manual focusing	
Max. Height	150mm	350mm (with 50mm fine adjustment)
Working Base	145*79mm	220*150mm stage with Φ 90mm black & white board
Video Format	MOV	
Image Format	JPEG	
Magnification	10X-300X	
Frame Rate	30fps	
Video Output	HDMI、USB、TF card	
TF Card	Supporting Max. 32G	
Light Source	Double goose neck high brightness LED lights	
Power	100-240V 5V DC	
Interface to PC	USB2.0	
OSD Language	Chinese, English, German, Spanish, French, Russian, Japanese, Korean, Italian, etc	
Operation System	Windows XP/Win7/Win8/Win10	

■ HDMI Digital Microscope

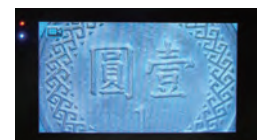
- HDMI digital microscope is the latest generation of optical microscope that combines traditional optical microscope and video lens.
- With functions such as taking photos and videos, it can be connected to an HDMI monitor to make the image clearer and more convenient for multiple people to watch. It can also store files through an SD card, and USB connects to a computer for image file editing and management.
- Application range: inspection, analysis, development and design of production line components in various industries, printing outlets, textile fabric inspection, biological observation, jewelry identification, antiquities determination, skin quality inspection, etc.

Key function

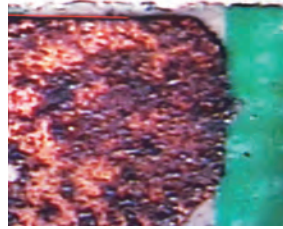


Operation function

1. Normal mode: directly use 3" LCD monitor to view
2. TF card storage function: insert a micro-SD card to store or replay image data on the 3" LCD monitor, or connect to a computer through a USB data cable to view the file content of the SD card. The maximum support capacity of the SD card is 32G
3. HDMI output mode: connect the HDMI interface of the microscope to the monitor with HDMI device, the maximum image quality resolution is 1920*1080
4. USB 2.0 output mode: connect the USB interface of the microscope to a desktop or laptop computer, and install special image editing software, which can capture picture, save, edit, and manage files



■ Biological Microscope



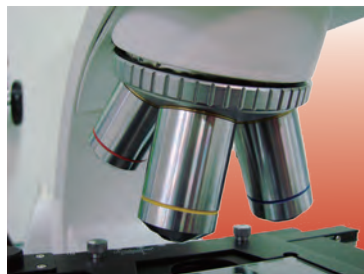
Optional for image unit:
1/3" CCD.
Image capture
software & cable.



OP-BM9001



Eyepiece



4 convertible objective lens units



X, Y-axis slide guide & coaxial knob



Coarse & fine adjustment focus knob.



Table & light adjustment knob.



ABBE condenser & IRIS diaphragm



Adjustment Kohler illumination



Up & down adjustment knob for condenser

■ Biological Microscope

Product Description:

- Excellent optic performance and stable ergonomic mechanical construction, high efficient, high quality and cost-effective biological microscope.
- **OP-BM9001** Biological Microscope, 30° Binocular head, WF10X/20mm Eyepiece, Infinity PLAN achromatic objectives: 4X, 10X, 40X,100X. 3W high brightness LED light
- **OP-BM9002** Biological Microscope, 30° Trinocular head, WF10X/20mm Eyepiece, 0.5X Video Coupler, Infinity PLAN achromatic objectives: 4X,10X,40X,100X. 3W high brightness LED light

Product Parameters

- **Optical System** : Infinity independent achromatic optical design
- **Observation Tube** : 30° inclined, interpupillary distance 48-75mm, 360°rotatable. Trinocular light is split 20/80 by a high quality coated prism
- **Eyepieces** : 10X, high-eyepoint, field of view Φ 20mm
- **Nosepieces** : Inward, four positions, Plan 4X/0.10 WD12.31 · 10X/0.25 WD5.03 · 40X/0.65 · WD0.72 · 100X/1.25 WD0.17(OIL)
- **Focusing System** : Working distance 60mm, coarse: 14mm per-rotation, fine: 0.1mm per rotation, minimum reading: 1 micron
- **Mechanical Stage** : 142mmx135mm platform with X-Y travel of 76mmx52mm, with scale mark and specimen-slide clip
- **Illumination** : Built-in 3W high brightness LED bulb, with field diaphragm provides Kohler type illumination, operated life:60000 hours
- **Electric** : CE approved of electrical parts
- **Condensers** : ABBE condenser NA 1.25 with iris diaphragm

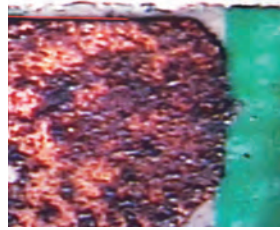
Standard Module

- Wide field 10X lens observation tube
- Infinity PLAN achromatic objectives: 4X,10X,40X,100X
- X, Y-axis slide guide & coaxial knob
- ABBE condenser & IRIS diaphragm
- Adjustment Kohler illumination
- Coaxial coarse & fine adjustment focus knob.
- Optional accessories: dark field · phase difference · polarized light · CCD · measuring software
- Optional lens: objectives: 20X/0.40 WD2.71 60X/0.80 WD0.69 Eyepieces: WF16X/14mm

Model No.	Objectives lens	Magnification	Type
OP-BM9001	4X/10X/40X/100X	40X/100X/400X/1000X	Binocular
OP-BM9002	4X/10X/40X/100X	40X/100X/400X/1000X	Trinocular



■ Trinocular Metallurgical Microscope

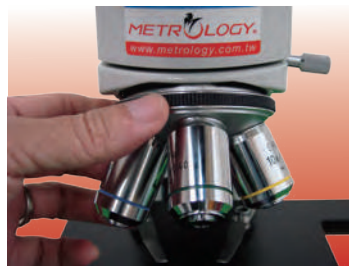


Optional for image unit:

1/3" CCD.
Image capture
software & cable.



Eyeiece



4 convertible objective lens units



X, Y-axis slide guide



Coarse & fine adjustment knob.

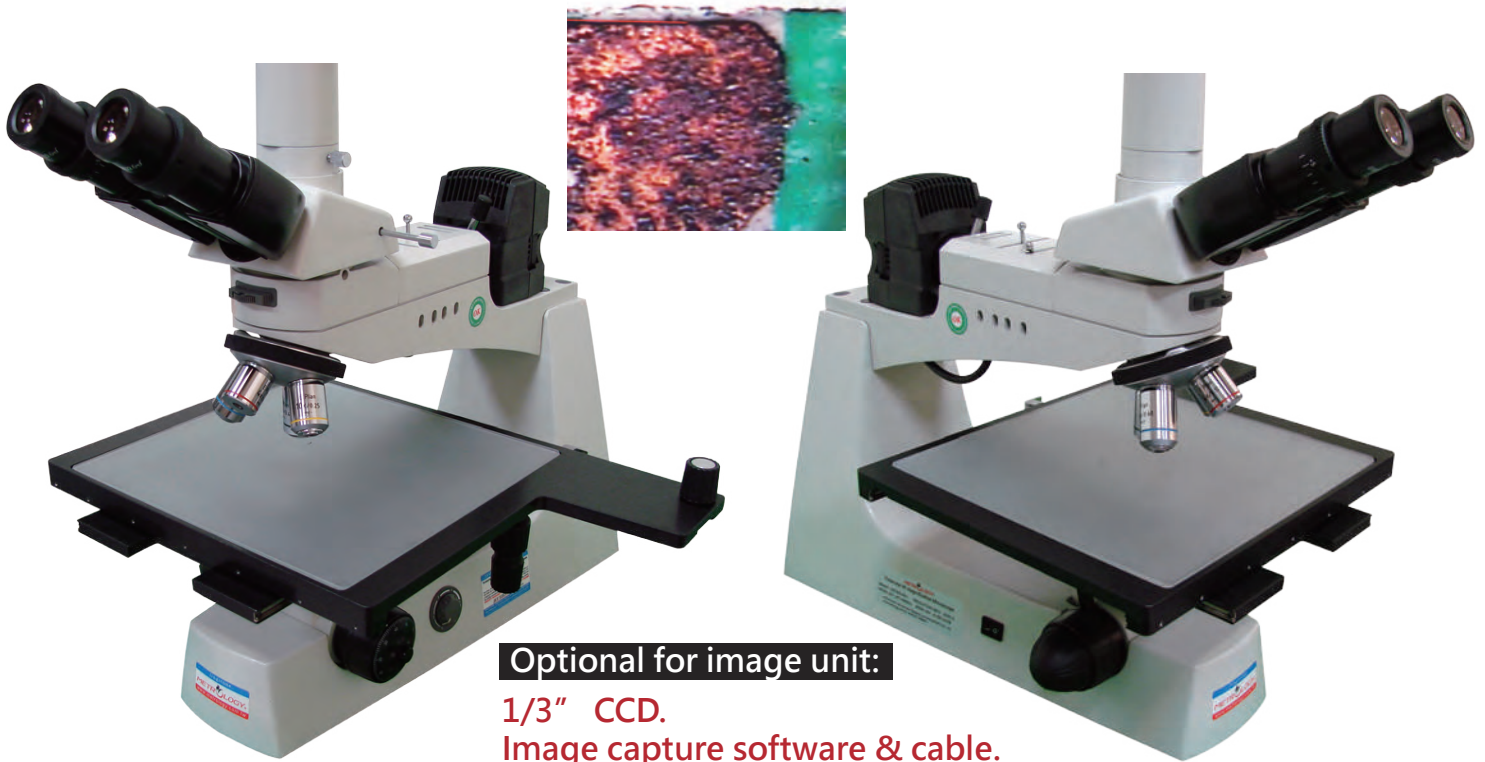
Standard Module

- Trinocular microscope head with WF 10X/18 eyepiece
- Coaxial illumination cast iron base.
- Infinity plain achromatic convertible objective lens unit.
- CCD connect unit (CCD optional)
- X-Y cross table, stage size: 150*140mm
- 6V 20W halogen light intensity adjustable illumination unit
- Focusing coaxial coarse and fine adjustment unit, fine division: 0.002mm

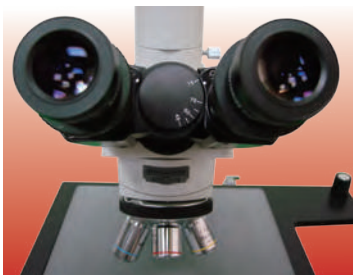


Model No.	Microscope Magnification	X-Y Travel Range	Objective Lens
OP-MM9002	40X/100X/200X/400X	75X50mm	4X/10X/20X/40X

■ Trinocular Metallurgical Microscope



Optional for image unit:
1/3" CCD.
Image capture software & cable.



Eyepiece



Filter & illumination



X, Y-axis slide guide



Coarse & fine adjustment knob.

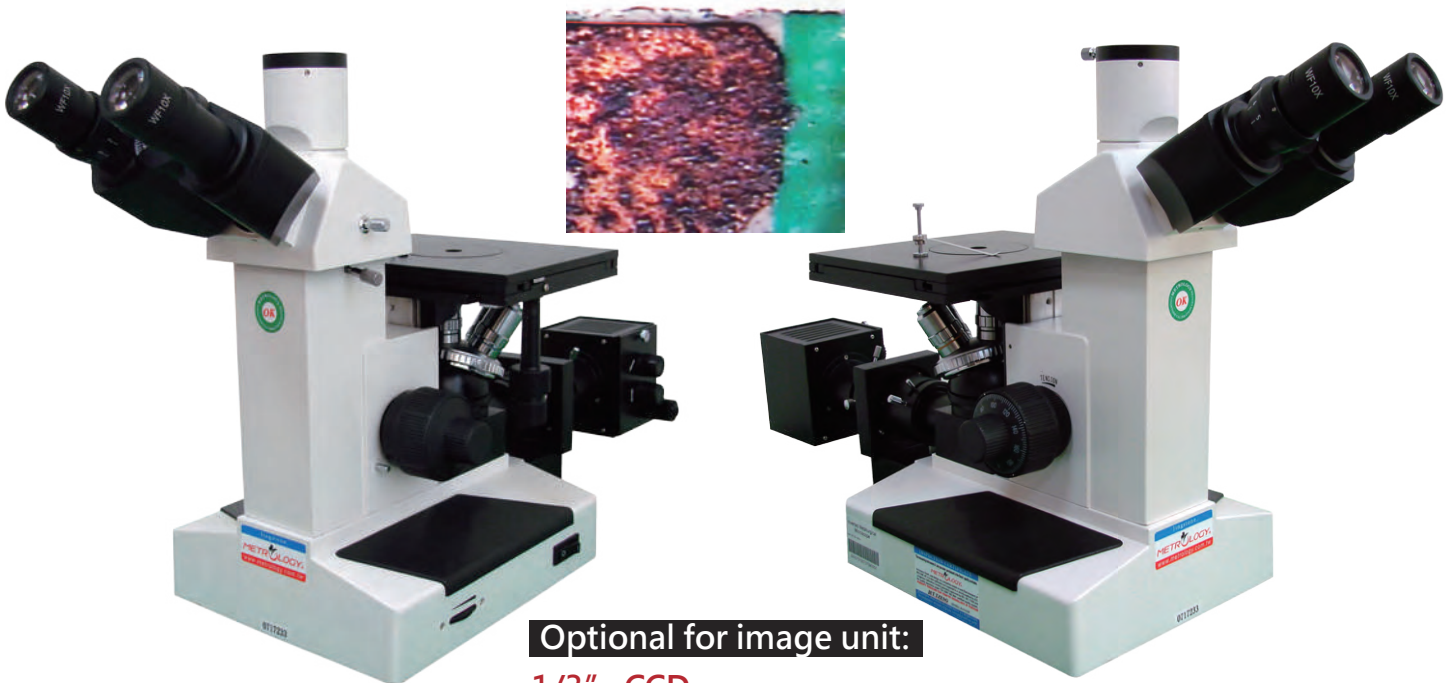
Standard Module

- Extra wide field trinocular microscope head with WF 10X/22 eyepiece
- Coaxial illumination cast iron base.
- Infinity plain achromatic convertible objective lens unit.
- CCD connect unit (CCD optional)
- X-Y cross table, stage size: 300*270mm
- 6V 20W halogen light intensity adjustable illumination unit
- Focusing coaxial coarse and fine adjustment unit, fine division: 0.002mm



Model No.	Microscope Magnification	X-Y Travel Range	Objective Lens
OP-MM9003	40X/100X/200X/400X	250X250mm	4X/10X/20X/40X

■ Inverted Trinocular Metallurgical Microscope



Optional for image unit:
1/3" CCD.
Image capture software & cable.

Standard Module

Model No.	Microscope Magnification	X-Y Travel Range	Objective Lens
OP-IM9000	100X/250X/400X/1000X	15X15mm	10X/25X/40X/100X

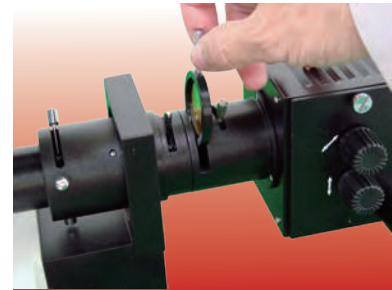
- Trinocular microscope head with WF 10X/18 eyepiece
- Coaxial illumination cast iron base.
- Plain achromatic convertible objective lens unit.
- CCD connect unit (CCD optional)
- X-Y cross table, stage size: 180*150mm
- 6V 20W halogen light intensity adjustable illumination unit
- Focusing coaxial coarse and fine adjustment unit, fine division: 0.002mm



Eyepiece



Field adjustable unit



Filter & illumination



X, Y-axis slide guide



4 convertible objective lens units



Coarse & fine adjustment knob

■ Tool Microscopes



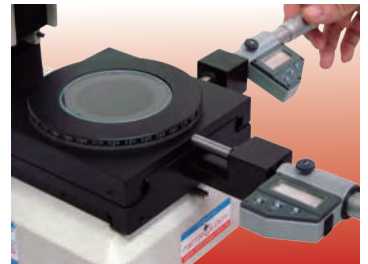
Dual eyepiece & CCD port



Zoom adjustable magnification knob



Adjustable focus knob



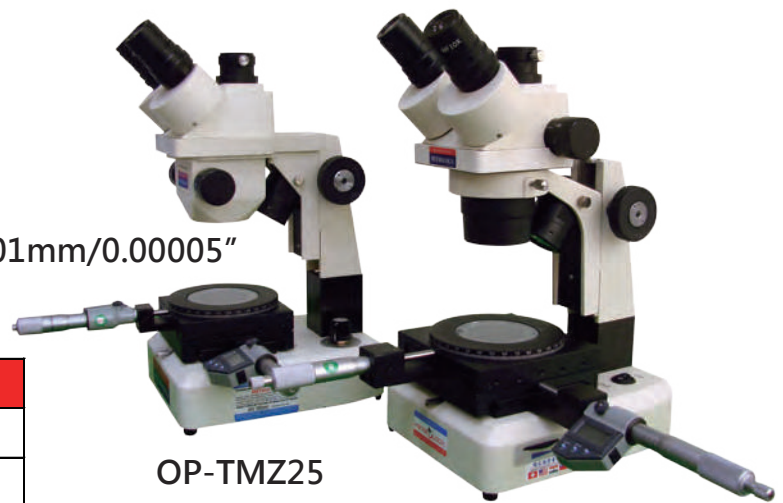
X-Y measuring table and micrometer head.

Standard Module

- Base with LED illumination
- Microscope head
- X-Y measuring stage (included rotary table)
- X-Y digital micrometer head resolution:0.001mm/0.00005"
- 10X Cross-line eyepiece & CCD port

Model No.	Microscope Mag.	Measuring Range
OP-TMZ25	7X~45X	25*25mm
OP-TMZ50		50*50mm

*Changeable eyepiece or combine with objective lenses for higher or lower magnification

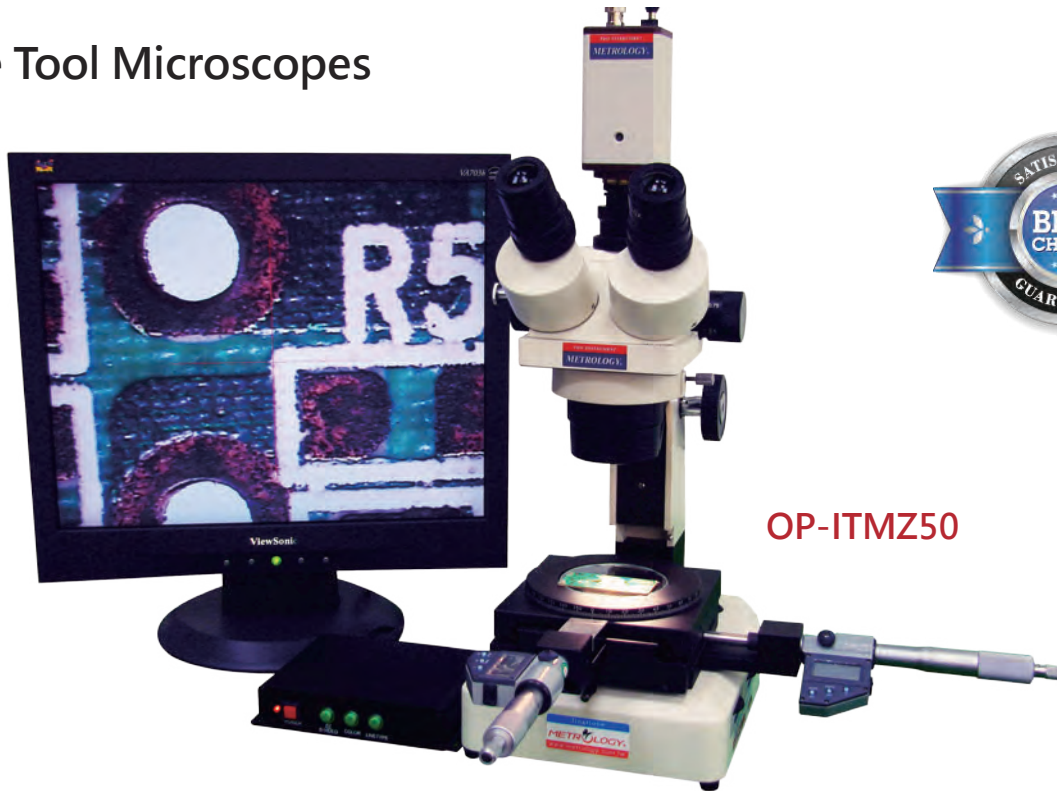


OP-TMZ25

OP-TMZ50

*Above pictures are for reference only, the products are mainly based on real products

■ Image Tool Microscopes



OP-ITMZ50



Dual eyepiece & CCD port



Upper halogen light



Zoom adjustable magnification knob



Adjustable focus knob



X-Y measuring table and micrometer head



X-Y cross-line generator

Standard Module

- Base with LED illumination
- Microscope head
- X-Y measuring stage (included rotary table)
- X-Y digital micrometer head resolution:0.001mm/0.00005"
- Cross-line generator (No. OP-CG2)
- 10X cross-line eyepiece & CCD port
- 1/3" color CCD & 19" LCD color display

Model No.	Microscope Mag.	Measuring Range
OP-ITMZ25	7X~45X	25*25 mm
OP-ITMZ50		50*50 mm

*Changeable eyepiece or combine with objective lenses for higher or lower magnification
 *Above pictures are for reference only, the products are mainly based on real products