Mikrosize®

iVideo-0325 3D Video Microscope

Contact us

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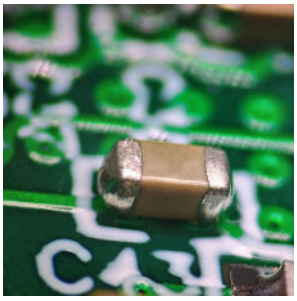
Feature and Application

The iVideo-0325 3D Video Microscope is a high-precision optical inspection instrument integrated with 2D/3D observation functions. Equipped with a 45° field-of-view continuous zoom lens and a 4K ultra-high definition camera, it supports dual output interfaces of HDMI and USB3.0. Featuring core functions including multi-mode measurement and image comparison, this device is applicable to microscopic observation and high-precision measurement in electronic manufacturing, precision machinery, material testing and other fields. It delivers easy operation and stable performance.

Product Feature

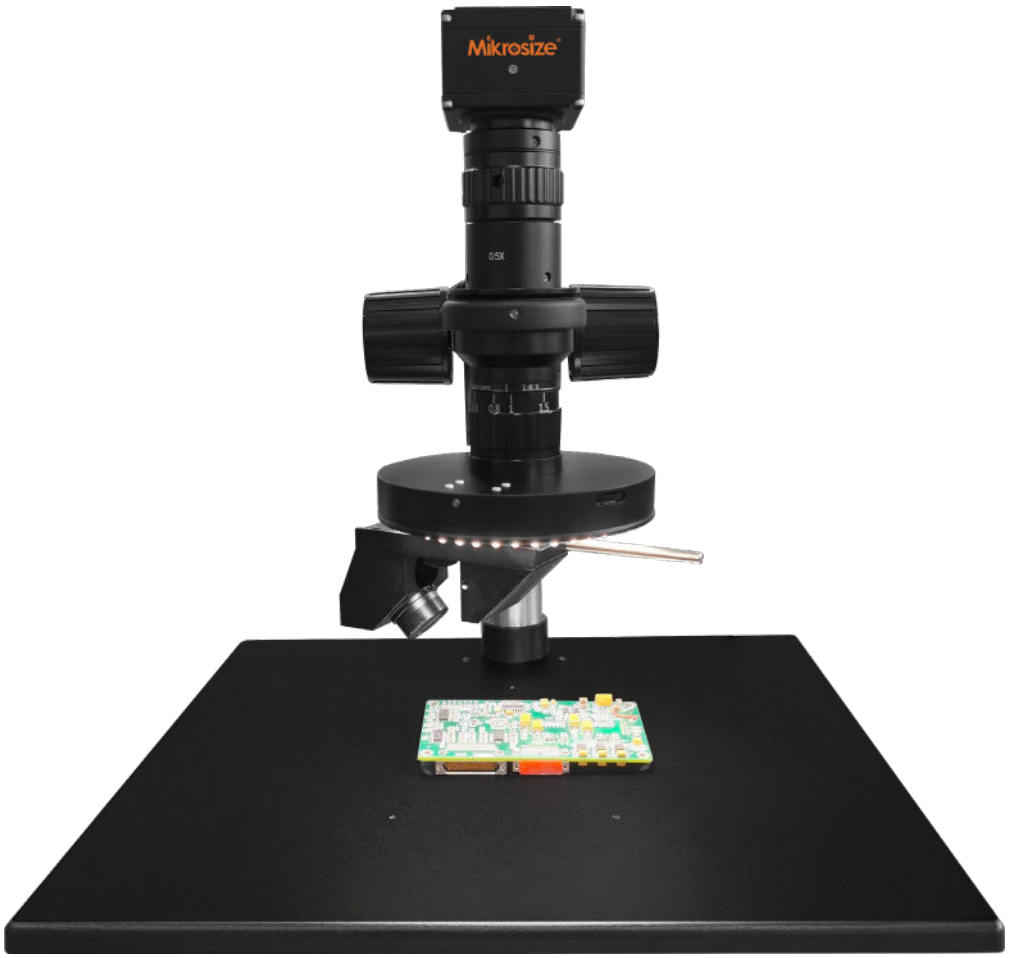
- Adopts a 0.6-5.0X continuous zoom lens. it supports one-click switching between 2D/3D observation mode. The 3D mode supports 360° rotation for all-round inspection.
- Equipped with a 4K Ultra HD camera, with a maximum resolution of 3840×2160, the image is clear and delicate.
- Supports direct display via HDMI and computer connection via USB3.0. It is compatible with mouse operation, and integrates photography, video recording, measurement and other functions in one device.
- Comes with a comprehensive set of measuring tools covering 18 types such as length, angle and area. The measurement accuracy reaches 0.01μm, fully meeting the demands of precision inspection.
- Allows customized setting of grid lines and saving of 8 preset schemes. It also supports image comparison and four-split screen comparison, facilitating multi-sample analysis.
- Equipped with a four-zone light source and a light source controller. The brightness is adjustable to adapt to samples of different materials and reduce reflection interference.
- Features a robust body structure. The large-sized base plate of 330×300mm (12.99×11.81 inches) ensures stable placement. The visualized operation process make it easy for beginners to operate.



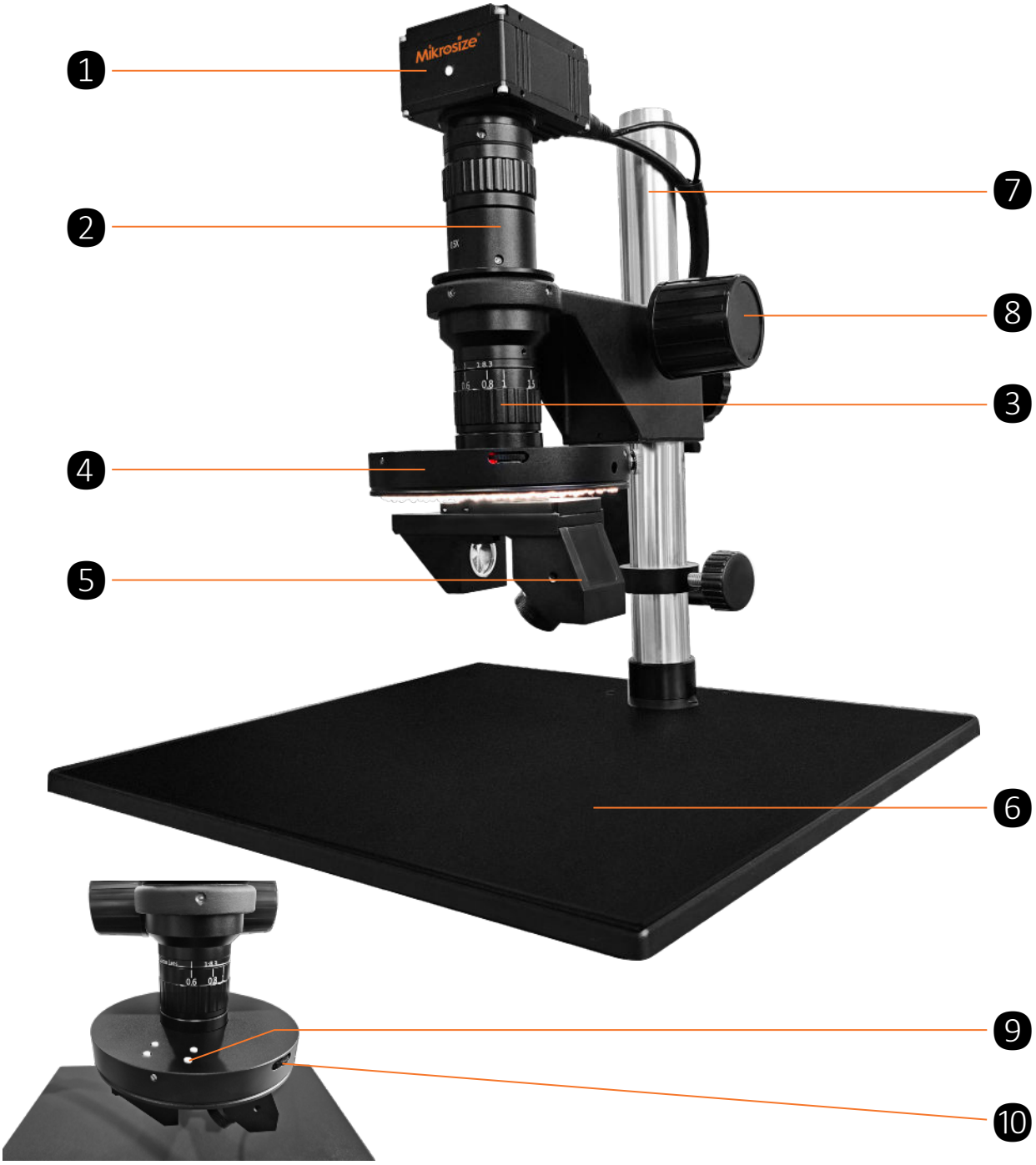
Feature and Application

Product Application

- Used for observing microstructures and detecting defects of electronic components, precision mechanical parts, PCB boards, new materials and more.
- Meets the requirements of real-time quality control on production sites and precision analysis in laboratories. It can be applied to incoming material inspection, process monitoring, finished product acceptance and other working procedures.
- Enables precision dimensional measurement and data archiving of products, suitable for various applications such as research institutions, factory quality inspection, and university experiments.
- Supports comparative analysis between real-time captured images and stored images,assisting in the consistency verification and anomaly detection during mass production.
- Compatible with samples made of metal, plastic, electronic components and other materials, and capable of detecting both planar and three-dimensional structures.



Product Structure



1.HDMI 4K Camera
2.0.5X CTV Adapter Tube
3.0.6 - 5.0X Continuous Zoom Lens Barrel
4.4-zone Light Source
5.2D/3D Viewer
6.330*300mm (12.99×11.81inch) Base Plate
7.32mm (1.26inch) Round Column
8.Coarse Focus Knob
9.Light Source Switch Button
10.Light Source Intensity Control Button

HDMI 4K Camera

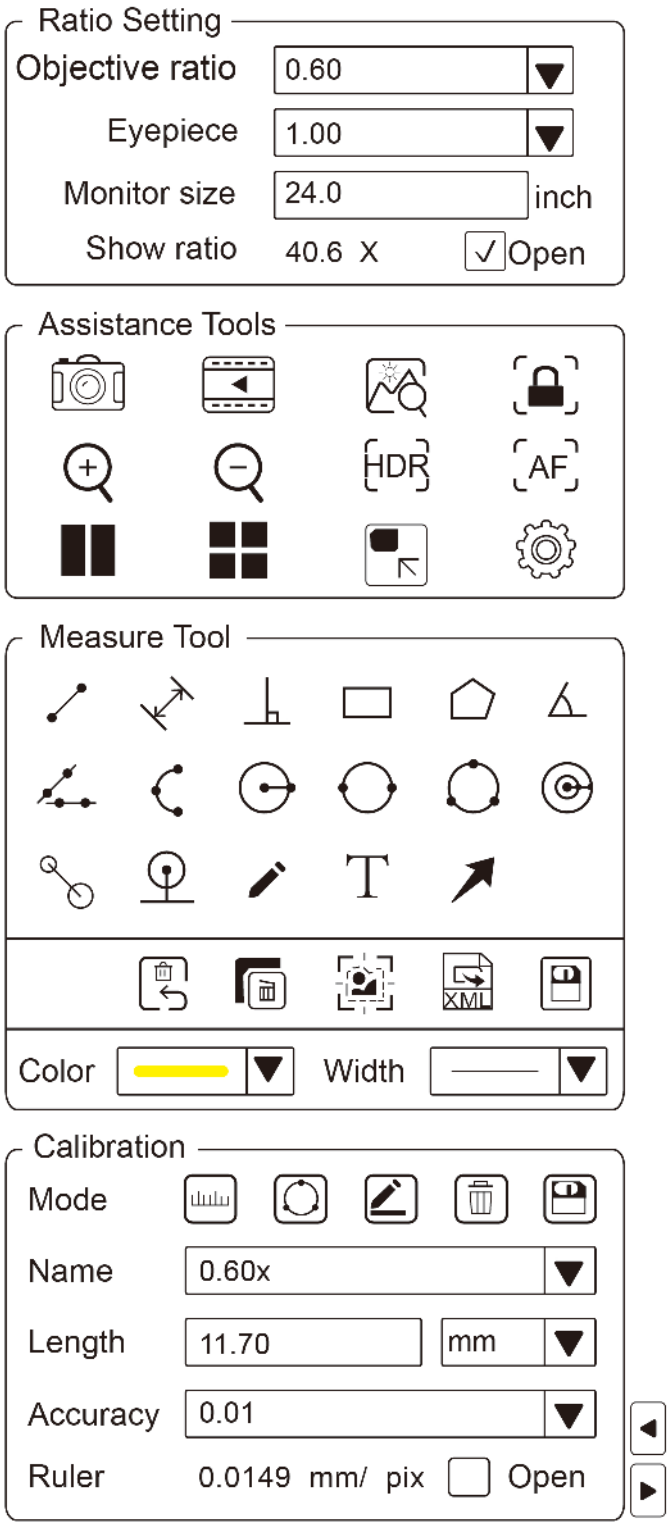
1.USB Interface **2.USB Interface** **3.HDMI Video Interface**
4.Power Interface (DC12V 2A) **5.Gigabit Ethernet Interface**

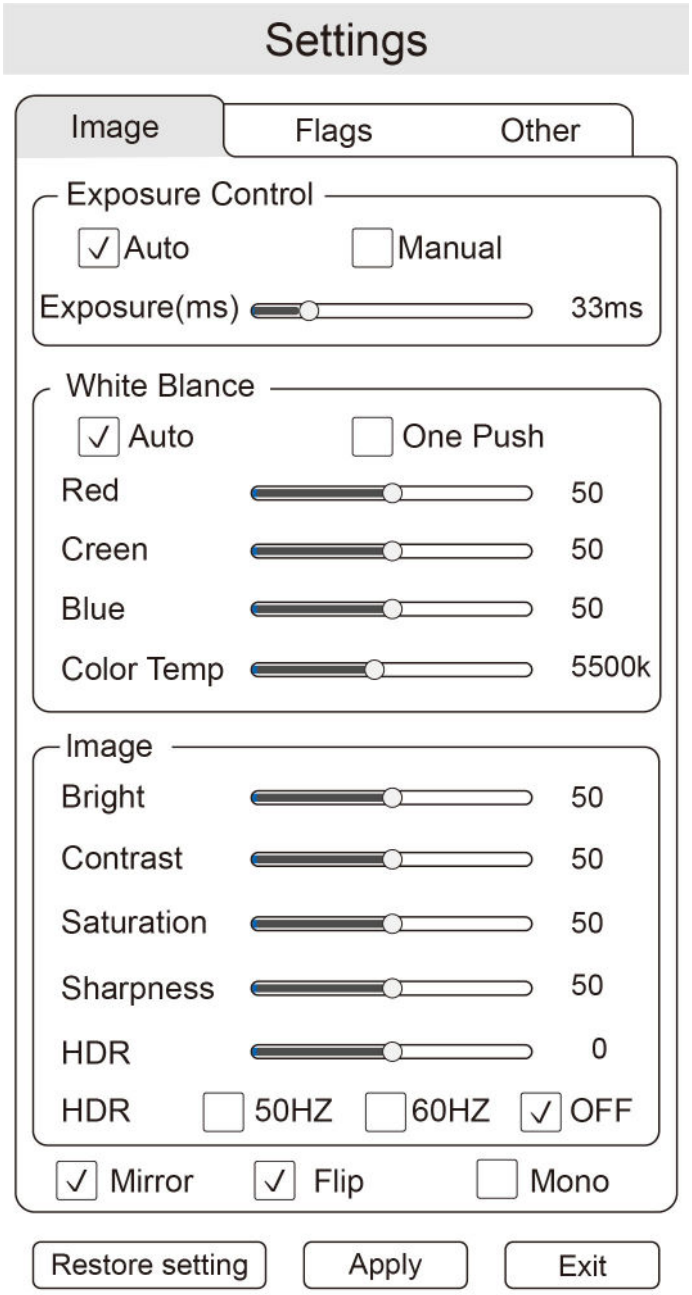
- Adopts high-performance Sony image sensor with low noise, high sensitivity and excellent color reproduction. It transmits 4K (3840×2160) videos at 60 frames per second without stuttering or latency.
- Supports storage of 32-megapixel high-definition images locally or over the network. Built-in quad-core high-speed processor ensures smooth multi-task processing, video processing and network transmission.
- Supports high-definition video recording and instant video playback. It is equipped with customizable interface and template editing functions. The HDMI 2.0 interface can automatically switch between 4K and 2K modes.
- Compatible with wired and wireless mouse & keyboard operation. The built-in image measurement system supports box selection measurement for higher efficiency and accuracy.
- Integrated with automatic edge detection to further improve measurement precision. A variety of shortcut operations and one-click measurement functions are available.
- Features one-click exposure and white balance. It supports network video streaming to solve remote working problems.

HDMI 4K Camera Parameters

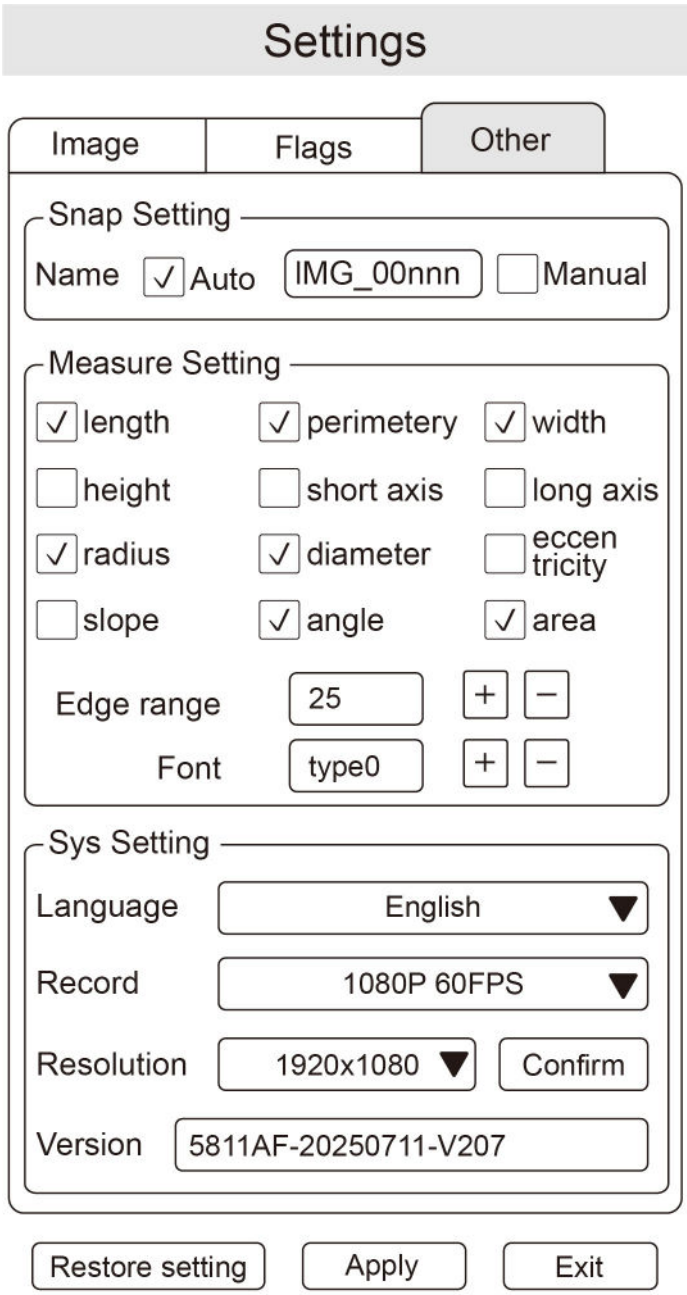
Optical Size	1/1.8”
Pixel Size	2.0um*2.0um
Resolution	3840*2160
Frame Rate	60fps
USB Interface	USB3.0*2
Output	HDMI
Chip Architecture	Ultra HD Smart IP Camera SOC
Operating System	LINUX
Kernel Structure	ARM Cortex A55
Main Frequency	1.2GHz *4
Storage Function	Store pictures and videos locally or on the network
Measurement Function	Supports box - selection measurement for quicker measurement and higher accuracy.Supports automatic edge - finding for more accurate measurement.Supports measurements of line segments, arcs, angles, polygons, etc.
Lens Mount	Standard C-mount

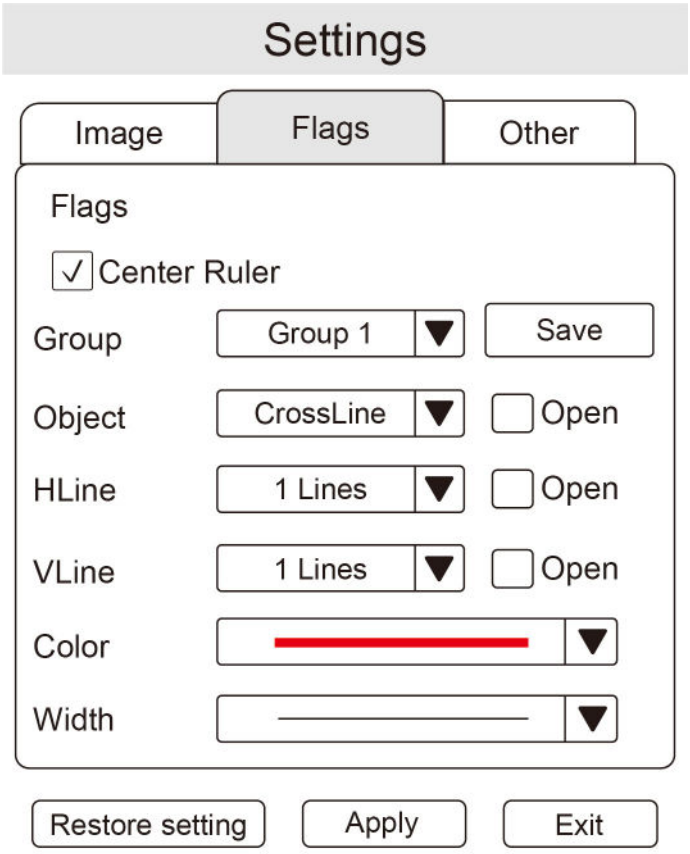
Software Measurement



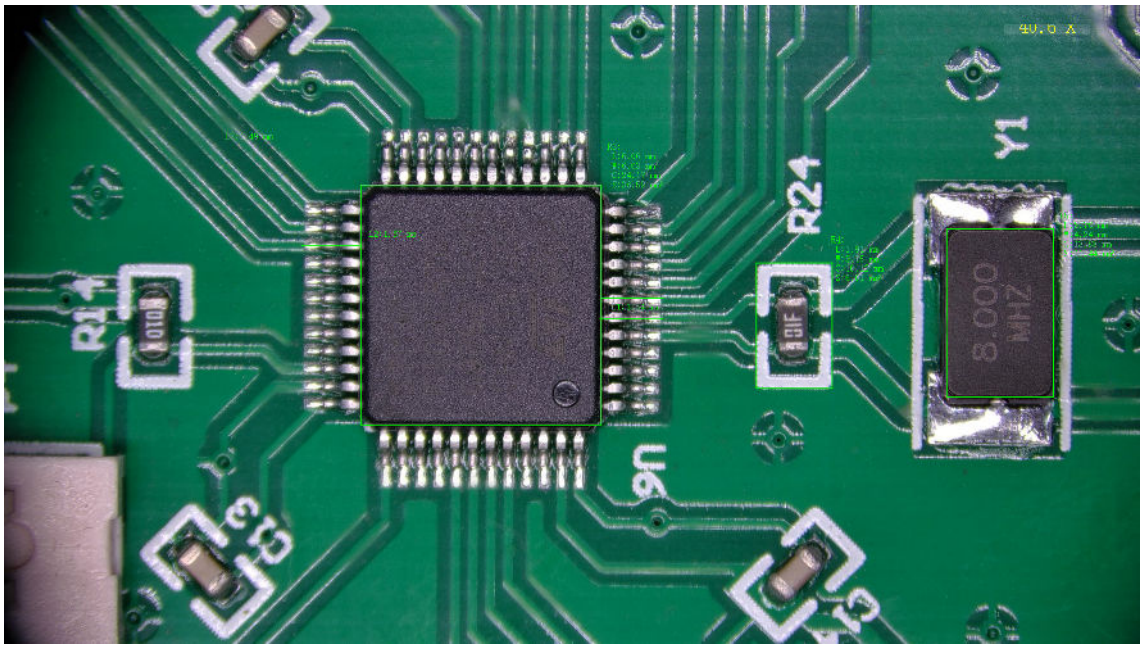


Software Measurement





Software Measurement



- Full-process Integrated Operation: Integrates observation, image capture, measurement and analysis functions. It can complete the process from real- time imaging to data archiving in one step, greatly simplifying the detection process.
- Intelligent Precision Measurement: Supports 18 types of geometric measurements. Combined with automatic edge detection technology, the accuracy is up to 0.01μm. The results can be directly exported to Excel to ensure data reliability.
- User-friendly Interface: Clear functional partitions. Advanced settings can be hidden for novice users. The device supports direct mouse control and guided operation, so users can master the operation after simple training.
- Multi-mode Image Optimization: Built-in HDR, shadow correction and anti-glare functions.
- Brightness and white balance can be adjusted with one click to adapt to complex imaging environments such as strong reflection and low light.
- Efficient Data Management & Sharing: Supports automatic naming and storage of images, and saves up to 8 groups of preset schemes. Data can be synchronized to network drives for convenient team collaboration and traceability.
- Flexible Function Expansion: Compatible with HDMI direct output and computer-based operation. It supports external storage devices and allows importing standard images for four-split screen comparison to meet diverse inspection requirements.

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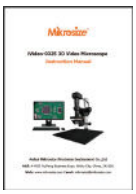
Technical Specification

Optical Magnification		2D:0.23X-1.88X	3D:0.09X-0.75X
Zoom Body Magnification		0.6-5.0X	
CTV Mount Magnification		0.5X	
Zoom Ratio		8.3:1	
Working Distance		2D:105mm/2D:4.13inch	3D:50mm/3D:1.97inch
Field of View		2D:30x17mm-3.7x2mm 2D:1.18x0.67inch-0.15x0.08inch	3D:70x45mm-9x5mm 3D:2.76x1.77inch-0.35x0.2inch
Lens Mount		Standard C Mount	
Observation Mode		2D/3D switchable via manual push-pull operation	
3D Viewer Angle		45°	
Base Plate Size		L*W 330*300mm(12.99*11.81inch) die-cast base plate	
Column Height		318mm（12.52inch）	
Focusing Mode		Coarse Focusing	
Column Diameter		32mm（1.26inch）	
Light Source	**Type**	208 pcs LED beads	
	Output Voltage/Power	12V/13W	
	Color Temperature	6000-7000K, pure white light	
	Dimensions	Outer Diameter 118mm (4.65inch), Inner Diameter 19mm (0.75inch)	
	Materials	Aluminum housing & metal power supply box	

Standard Delivery

Name	Qty	Photo
Main Unit (with lens and camera)	1pc	
HDMI Cable	1pc	
USB3.0 Data Cable	1pc	
DC-12V 1A Power Adapter	1pc	
DC-12V 2A Power Adapter	1pc	
Mouse	1pc	
Operation Manual	1copy	
Certificate of Conformity/ Warranty Card	each 1copy	

Optional Accessories

Auxiliary Objectives

Model	Auxiliary Objective	Working Distance
AOL03	0.3X	270mm
AOL04	0.4X	195mm
AOL05	0.5X	160mm
AOL06	0.6X	130mm
AOL075	0.75X	105mm
AOL15	1.5X	50mm
AOL20	2.0X	39mm

Optional Accessories

3D Microscope CTV Adapters

Model	Zoom Body	CTV Tube Specification
CTV03	CTV Tube	Standard C-mount, Optical Magnification: 0.18-1.5X
CTV075	CTV Tube	Standard C-mount, Optical Magnification: 0.45-3.75X
CTV10	CTV Tube	Standard C-mount, Optical Magnification: 0.6-5X
CTV15	CTV Tube	Standard C-mount, Optical Magnification: 0.9-7.5X