

Instant Vision System

New IVS Series



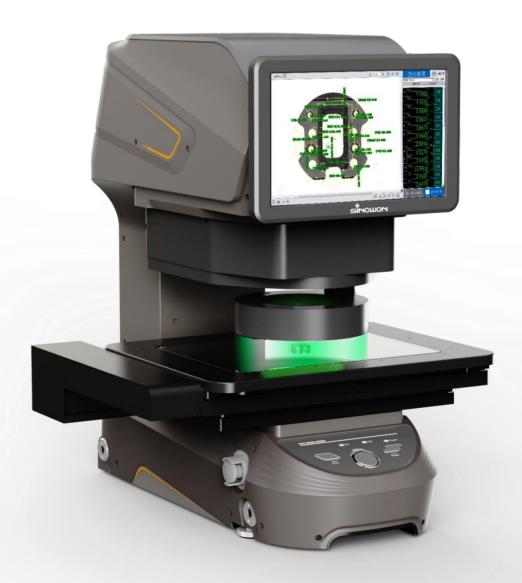
All Measurements Can Be Completed By One Shot

The Max Measuring Travel 300x200mm

Movable Measurement with Field Mode Selection

Wide Field for Instant Measurement, Small Field for High Precision Measurement





IVS Series Solution To Auto-Production Line

Solve the Inherent Problems In Dimension Measurement

Benchtop Instant Measurement System

- Table structure, compact size, easy to handle.
- One-Shot Measurement, can also be matched with IO signal to achieve automatic measurement.
- The report can be uploaded automatically into data management system.

High Precision Measurement Under Surface Light

- Equipped with Double Magnification Telecentric Lens and two 20MP camera, auto multiangle surface light and optional coaxial surface light.
- With the independent powerful AI edge calculation algorithm, it can easily realize precise edge searching on the surface and filter invalid areas for boundary clutter.
- The measurement repeatability of surface light can also reach the similar level as that of bottom light.

Fast Measurement And Easy Operation

- Can measure 100 dimensions in one second, greatly reducing the measurement time.
- The operation interface of the software is simple and easy to be understood, and the measurement program and parameter setting can be easily written.
- With automatic focusing, automatic positioning and automatic measurement function, anyone operation can obtain stable measurement results.







Convenient



Benchtop Structure

Compact feature, benchtop structure, easy to handle, the system can adapt to a variety of environments. It is suitable for in-line size measurement.



One-Shot for Measuring

Through the positioning function, it can automatically identify the position and direction of the product. The product is placed randomly on the platform, and it can be measured by pressing one button. It can also be matched with the CUSTOMER IO signal to achieve automatic measurement.

Various Forms of Report Output

Detection report and statistical report can be completed through one-click production, without data transmission and computer input and other tedious process, support a variety of formats. It can also be automatically uploaded to the customer data management system.

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High-Precision Lens Module

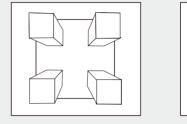
Powerful Hardware Combination | High Precision Measurement

Equipped with Double Magnification Telecentric Lens and two 20MP camera, auto multi-angle surface light and optional coaxial surface light. With the independent powerful AI edge calculation algorithm, it can easily realize precise edge searching on the surface and filter invalid areas for boundary clutter. The measurement repeatability of surface light can also reach the similar level as that of bottom light.

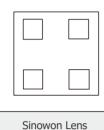


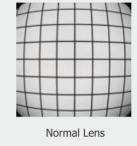
High-Precision Lens Module

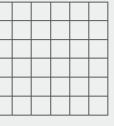
Double Magnification Telecentric Lens



Normal Lens







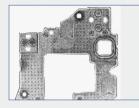
Sinowon Lens

20MP High-Precision CDD

Using a 1" 20-megapixel black-and-white camera, the number of pixels has been increased to two times that of traditional models, and the tiny edges that were difficult to observe in the past can also be observed. With movable measurement, field of view switching, the system can achieve high precision and wide field measurement, while improving accuracy and shortening measurement time.



High-Precision CDD



Wide-Field Image



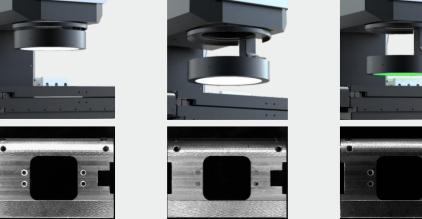
Mode Changed



High-Precision Image

Adjustable Light Source

Set multiple lighting units into one with lifting multi-angle surface light. The software is equipped with light automatic adjustment function. Through the built-in brightness sensor for different ambient light source, the system can automatically adjust to the best lighting conditions.



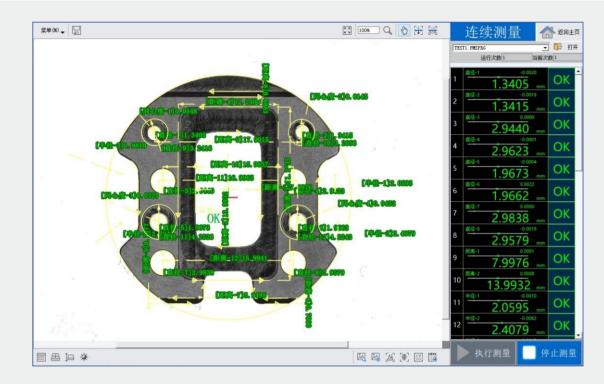


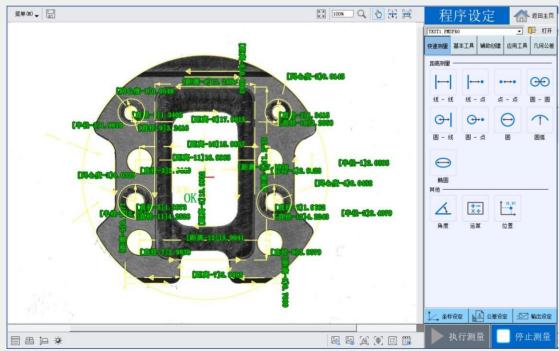




Easy | Fast Measurement And Easy Operation

The system can measure 100 dimensions in one second, greatly reducing the measurement time. The operation interface of the software is simple and easy to be understood, and the measurement program and parameter setting can be easily written. With automatic focusing, automatic positioning and automatic measurement function, anyone operation can obtain stable measurement results.



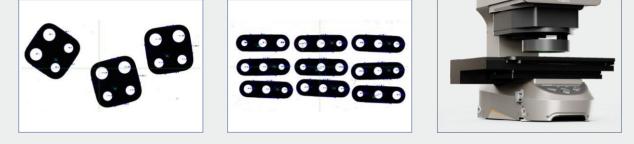




Automatic Identification & Simultaneous Measurement

Easy

The system can automatically identify the position and direction of the product. Products can be placed randomly and can be measured simultaneously. With 300*200mm large field of vision, one-time overall imaging, even if increasing the measurement position, the system will not increase the measurement time, greatly reducing the measurement time and improve the measurement efficiency.



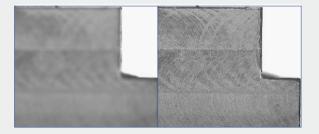
Easy Software Operation

The software functions are simple and easy to understand, with process instructions, operators can easily complete the product measurement program according to each instruction.

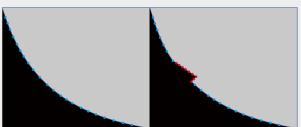


Anyone Can Obtain Stable Results

The automatic focusing and edge invalid point automatic filtering function of the software can eliminate the error caused by different focusing and the edge invalid part of the product, so as to achieve stable detection results for anyone operation.



Automatic Focal Length Adjustment and Measurement



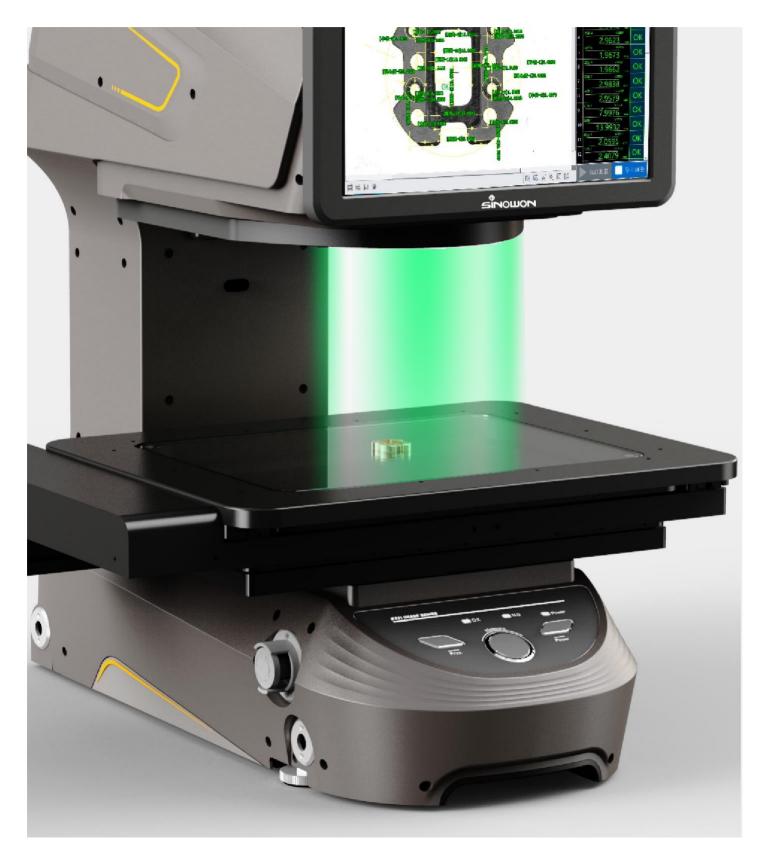
Automatically Eliminating Invalid Edge Points





Working Stage

Working Stage | MAX 300 x 200 mm



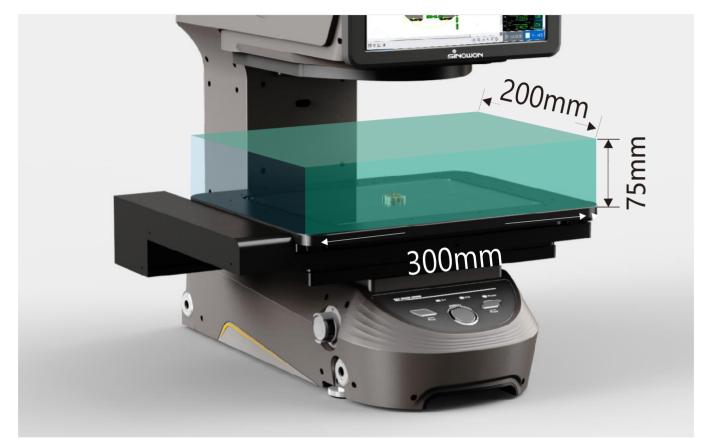
Product Description

¢ Sinowon

IVS Series

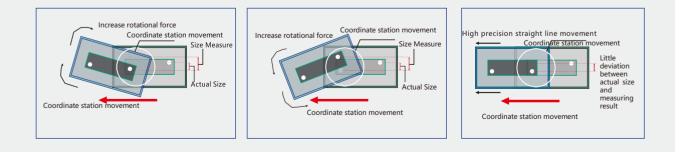
Working Stage

The maximum size of measuring objects allowed on the mobile platform is $300 \text{ mm} \times 200 \text{ mm}$ and the height is 75 mm. The working stage adopts a new design that reduces the resistance of the motor and the feed screw to the limit. The moving distance is smaller and more stable, and the high precision measurement can be achieved without fixed measuring objects.



High Precision Drive System

By adjusting the movement of the cross roller rail in microns, excellent straightness is achieved and errors caused by the movement of the moving platform are eliminated.

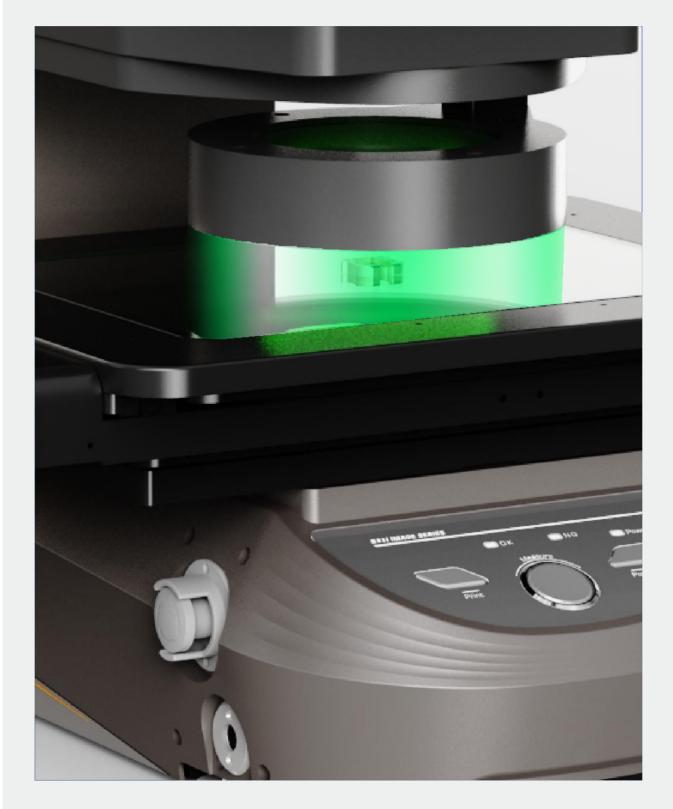




Light Source

Light Source | Variable Lighting Unit

Accurately extract edges according to optimal lighting conditions





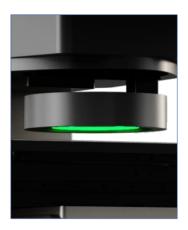
Light Source

Assemble Multiple Lighting Units into One

Light source sets different lighting, according to the different detection products, automatic debugging of lighting brightness, switching the best color lighting conditions.







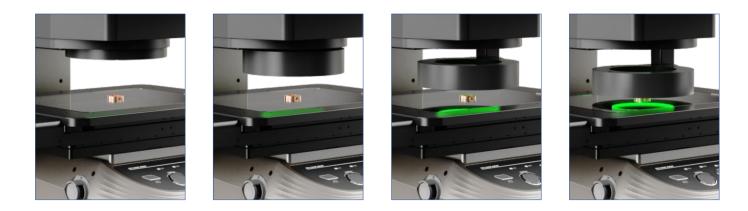
Green Ring Light

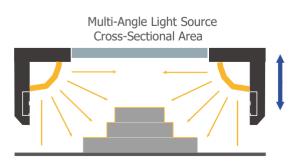
White Ring Light

White Ring Light

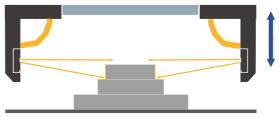
Automatically Switching the Best Color Lighting Conditions

With the combination of multiple variable adjustment lighting units, through the built-in brightness sensor for different environmental lighting, the system will adjust the height, brightness and angle of the light source to achieve the best visual effect, precise object edge.



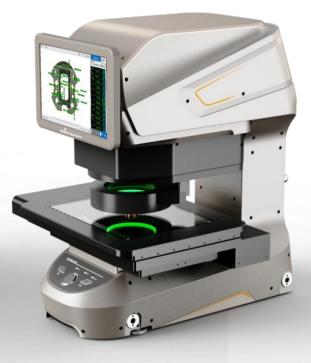


Slit Ring Light Source Cross-Sectional Area









IVS-100D

- Range(mm): φ100mm
- Ring Light (Adjustable)
- Auto Focus
- Double Magnification Telecentric Lens

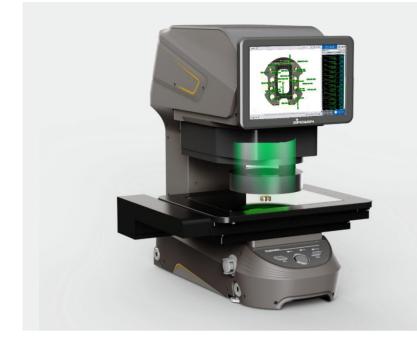
IVS-202D

- Range(mm): 200X200X75
- Ring Light (Adjustable)
- Auto Focus
- Double Magnification Telecentric Lens

IVS-302D

- Range(mm): 300X200X75
- Ring Light (Adjustable)
- Auto Focus
- Double Magnification Telecentric Lens





Instant Vision

IVS Series

IVS Series

Specification

	Model		IVS-100D	IVS-202D	IVS-302D					
		Х	φ100	200mm	300mm					
Measuring Range		Y	φισο	200mm	200mm					
		Z	75mm	75mm	75mm					
FOV	High-Pred	cision Mode	26mm X 18mm							
FUV	Wide-F	ield Mode	φ100mm ± 1.5μm ± 3μm							
Repeatability	High-Pred	cision Mode								
,	Wide-F	ield Mode								
	Minimum Unit		0.1µm							
	Llich Dussisian	Without Binding		±1.5µm						
A	High-Precision	With Binding	\	±2+L/150µm	±2+L/150µm					
Accuracy	Wide Field	Without Binding	±3µm							
	Wide-Field	With Binding	\	±3+L/150µm	±3+L/150µm					
	Weight		33 Kg	45 Kg	50 Kg					
	Ca	mera	1" 20MP BW Camera * 2							
	L	ens	Double Magnification Telecentric Lens							
Optical System	Surfa	ce Light	Two-Ring Liftable Light							
	Botto	m Light	Green Parallel Bottom Light							
	Capacity		5 Kg							
1	Measuring Softwar	e	GD&T Software							
	Power Supply		220V±10%,50Hz							
W	/orking Environme	nt	Temperature: 20±3°C, Humidity: 30-80%, Vibration: < 0.002g,15H							
Din	nension (L*W*H)	mm	600*300*650mm 600*410*650mm 600*510*650mm							



Sinowon Enterprise Culture



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