



## LARGE SIZE QUICK MEASUREMENT SYSTEM CODE QMS-A450



### SPECIFICATION

<b>Optical lens</b>		dual-field dual-telecentric low-distortion lens	
<b>Measurement range</b>		wide view field 500×400mm	small view field 430×350mm
<b>Measurement Accuracy</b> *	without stitching	±3μm <sup>①</sup>	±1μm <sup>②</sup>
	with stitching	±(5+0.02L)μm <sup>③</sup>	±(3+0.02L)μm <sup>④</sup>
<b>Repeatability</b>	without stitching	±1μm	±0.5μm
	with stitching	±2μm	±1.5μm
<b>Illumination system</b>	<b>transmission light</b>	telecentric illuminator, green light	
	<b>surface light</b>	vertical illuminator, high angle ring white light vertical illuminator, 4-zone low and medium angle ring white light (electric) vertical illuminator, circular (directional) green light (electric)	
	<b>coaxial light (optional)</b>	vertical illuminator, white light	
<b>Max. weight of workpiece</b>		25kg	
<b>Measurement time</b>		<2s	
<b>Measurement data</b>		2D measurement	
<b>Environmental requirement</b>		temperature: 20°C±2°C, relative humidity: 30%~80%, vibration: <0.002g, less than 15Hz	
<b>Power supply</b>		220V, 50Hz, 1200W	
<b>Dimension (L×W×H)</b>		1060×860×1890mm	
<b>Weight</b>		650kg	

\* The optimum temperature is 20°C±1°C

- ① Within 73×49mm, on focal position and environment temperature at 20°C±1°C
- ② Within 16×12mm, on focal position and environment temperature at 20°C±1°C
- ③ Within 450×360mm, on focal position and environment temperature at 20°C±1°C
- ④ Within 387×315mm, on focal position and environment temperature at 20°C±1°C

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- One or more workpieces can be measured by one step operation
- Place workpieces at any position
- Focus and measure automatically
- Measurement of 999+ dimensions and 200+ workpieces
- Suitable for parts with high precision requirements for large, medium, and small sizes

**STANDARD DELIVERY**

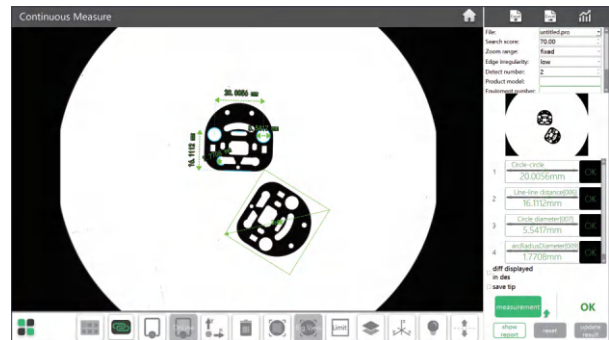
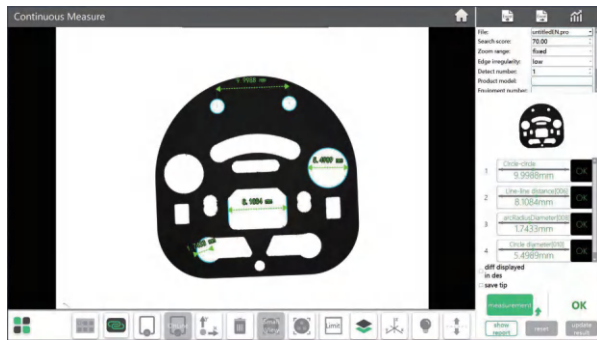
Main unit	1 pc
Computer	1 pc
Software	1 pc

**OPTIONAL ACCESSORY**

Coaxial light illumination	QMS-43-A1
Data transmission function of software	QMS-23-D1
CAD import function of software	QMS-23-C1
Laser sensor	QMS-43-SJ1
Foot-switch	QMS-43-FS1

**Software (included)**

- Automatically measure widths, holes, rings, angles at the same time, simple and efficient



- Measuring result can be stored automatically. OK items and NG items can be counted automatically



SMALL VIEW FIELD SUITABLE FOR MEASURING  
SMALL SIZES SUCH AS THREADS AND CHAMFERS

## HIGH PRECISION QUICK MEASUREMENT SYSTEM CODE QMS-H210



### SPECIFICATION

Optical lens		dual-field dual-telecentric low-distortion lens	
Measurement range		wide view field 210×130mm	small view field 200×100mm
Measurement Accuracy	without stitching	±2μm <sup>①</sup>	±0.7μm <sup>②</sup>
	with stitching	±(4+0.02L)μm <sup>③</sup>	±(2.7+0.02L)μm <sup>④</sup>
Repeatability	without stitching	±1μm	±0.25μm
	with stitching	±2μm	±1.25μm
Illumination system	transmission light	telecentric illuminator, green light	
	surface light	vertical illuminator, high angle ring white light vertical illuminator, 4-zone low and medium angle ring white light (electric) vertical illuminator, circular (directional) green light (electric)	
	coaxial light	vertical illuminator, white light	
Max. weight of workpiece		5kg	
Measurement time		<2s	
Measurement data		2D measurement	
Environmental requirement		temperature: 20°C±2°C, relative humidity: 30%~80%, vibration: <0.002g, less than 15Hz	
Power supply		220V, 50Hz, 600W	
Dimension (L×W×H)		460×515×740mm	
Weight		45kg	

\* The optimum temperature is 20°C±1°C

① Within 20×20mm, on focal position and environment temperature at 20°C±1°C

② Within 8×5mm, on focal position and environment temperature at 20°C±1°C

③ Within 189×117mm, on focal position and environment temperature at 20°C±1°C, and workpiece is less than 2kg, L is the travel of stage

④ Within 180×90mm, on focal position and environment temperature at 20°C±1°C, and workpiece is less than 2kg, L is the travel of stage

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- One or more workpieces can be measured by one step operation
- Place workpieces at any position
- Focus and measure automatically
- Measurement of 999+dimensions and 300+workpieces
- Suitable for parts with high precision for medium and small sizes

**STANDARD DELIVERY**

Main unit	1 pc
Computer	1 pc
Software	1 pc



rotary table (optional)



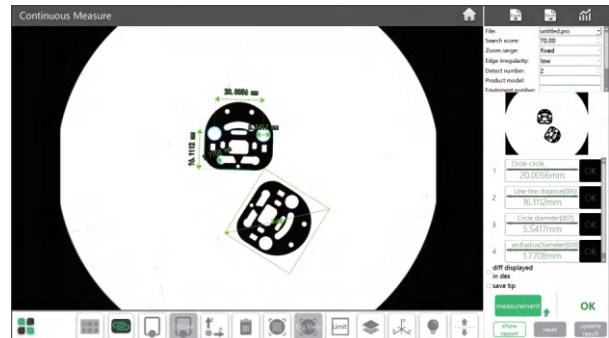
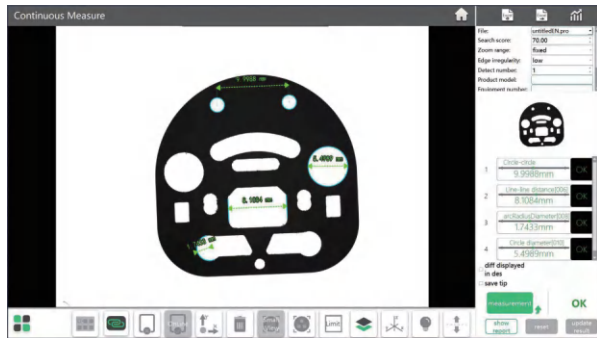
11.6" LCD (optional)

**OPTIONAL ACCESSORY**

Data transmission function of software	QMS-23-D1
CAD import function of software	QMS-23-C1
Laser sensor	QMS-43-SJ1 (must be installed in factory)
Foot-switch	QMS-43-FS1
11.6" LCD	QMS-23-B1 (must be installed in factory)
MES transmission function of software	QMS-23-E1
Rotary table	QMS-43-RT1 (must be installed in factory)

**Software (included)**

- Automatically measure widths, holes, rings, angles at the same time, simple and efficient

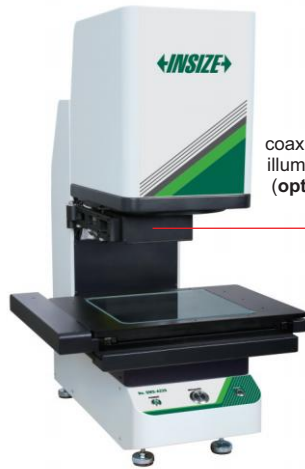


- Measuring result can be stored automatically. OK items and NG items can be counted automatically



SMALL VIEW FIELD OF QMS-A220 AND QMS-A315 SUITABLE FOR MEASURING SMALL SIZES SUCH AS THREADS AND CHAMFERS

## QUICK MEASUREMENT SYSTEMS (WITH STITCHING)



QMS-A220

coaxial light illumination (optional)

software (included)



computer (included)

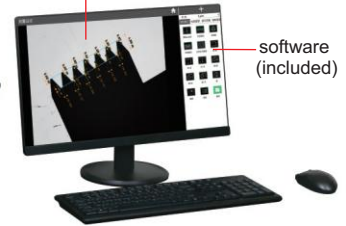
coaxial light illumination (optional)



QMS-A320

computer (included)

software (included)



### SPECIFICATION

Code		QMS-A220		QMS-A315		QMS-A320	
Optical lens		dual-field dual-telecentric low-distortion lens					
View field range		wide view field	small view field	wide view field	small view field	wide view field	small view field
Measurement range		93×62mm	20×16mm	100×80mm	25×20mm	150×110mm	50×35mm
Measurement accuracy *		±3μm <sup>①</sup>	±1μm <sup>②</sup>	±3μm <sup>①</sup>	±1μm <sup>②</sup>	±5μm <sup>③</sup>	±2μm <sup>④</sup>
Repeatability		±1μm	±0.5μm	±1μm	±0.5μm	±1μm	±0.5μm
Max. weight of workpiece		5kg					
Measurement time		<2s					
Measurement data		2D measurement					
Power supply		220V, 50Hz, 600W					
Illumination system	back light	telecentric illuminator, green light					
	ring light	4-zone circular white high light circular (directional) low-angle green light (electric)					
	coaxial light (optional)	vertical illuminator, white light					
Environmental requirement		temperature: 20°C±2°C, relative humidity: 30%~80%, vibration: <0.002g, less than 15Hz					
Dimension (L×W×H)		532×480×766mm		532×497×766mm		669×510×883mm	
Weight		50kg		60kg		68kg	

\* The optimum temperature is 20°C±1°C

- ① Within 80×64mm, on focal position and environment temperature at 20°C±1°C
- ② Within 20×16mm, on focal position and environment temperature at 20°C±1°C
- ③ Within 120×88mm, on focal position and environment temperature at 20°C±1°C
- ④ Within 40×28mm, on focal position and environment temperature at 20°C±1°C
- ⑤ Within 180×180mm, on focal position, environment temperature at 20°C±1°C, and workpiece is less than 2kg, L is the travel of stage
- ⑥ Within 117×117mm, on focal position, environment temperature at 20°C±1°C, and workpiece is less than 2kg, L is the travel of stage
- ⑦ Within 270×180mm, on focal position, environment temperature at 20°C±1°C, and workpiece is less than 2kg, L is the travel of stage
- ⑧ Within 207×117mm, on focal position, environment temperature at 20°C±1°C, and workpiece is less than 2kg, L is the travel of stage
- ⑨ Within 270×189mm, on focal position, environment temperature at 20°C±1°C, and workpiece is less than 2kg, L is the travel of stage
- ⑩ Within 180×121mm, on focal position, environment temperature at 20°C±1°C, and workpiece is less than 2kg, L is the travel of stage

To be continued

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- One or more workpieces can be measured by one step operation
- Place workpieces at any position
- Focus and measure automatically
- Measurement of 999+dimensions and 200+workpieces
- **QMS-A220** and **QMS-A315** are suitable for small and medium-size parts with high precision requirements
- **QMS-A320** is suitable for medium-size parts with low accuracy requirements and fast efficiency requirements

### STANDARD DELIVERY

Main unit	1 pc
Computer	1 pc
Software	1 pc



rotary table (optional)



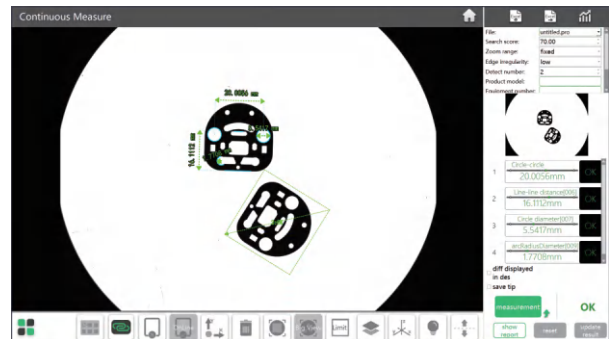
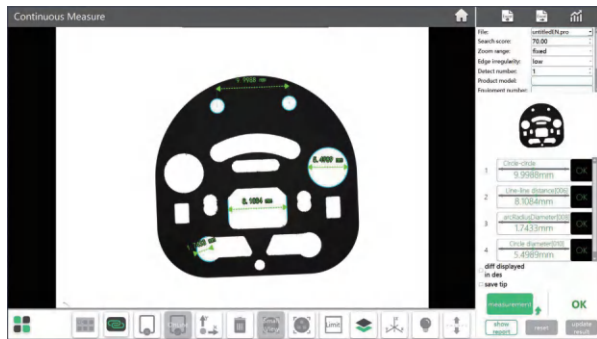
11.6" LCD (optional)

### OPTIONAL ACCESSORY

Coaxial light illumination	QMS-23-A3 (for QMS-A220, QMS-A315) QMS-23-A4 (for QMS-A320)
Data transmission function of software	QMS-23-D1
CAD import function of software	QMS-23-C1
Laser sensor	QMS-43-SJ1 (for QMS-A315)
Foot-switch	QMS-43-FS1
11.6" LCD	QMS-23-B1 (must be installed in factory)
Rotary table	QMS-43-RT1 (must be installed in factory)

### Software (included)

- Automatically measure widths, holes, rings, angles at the same time, simple and efficient

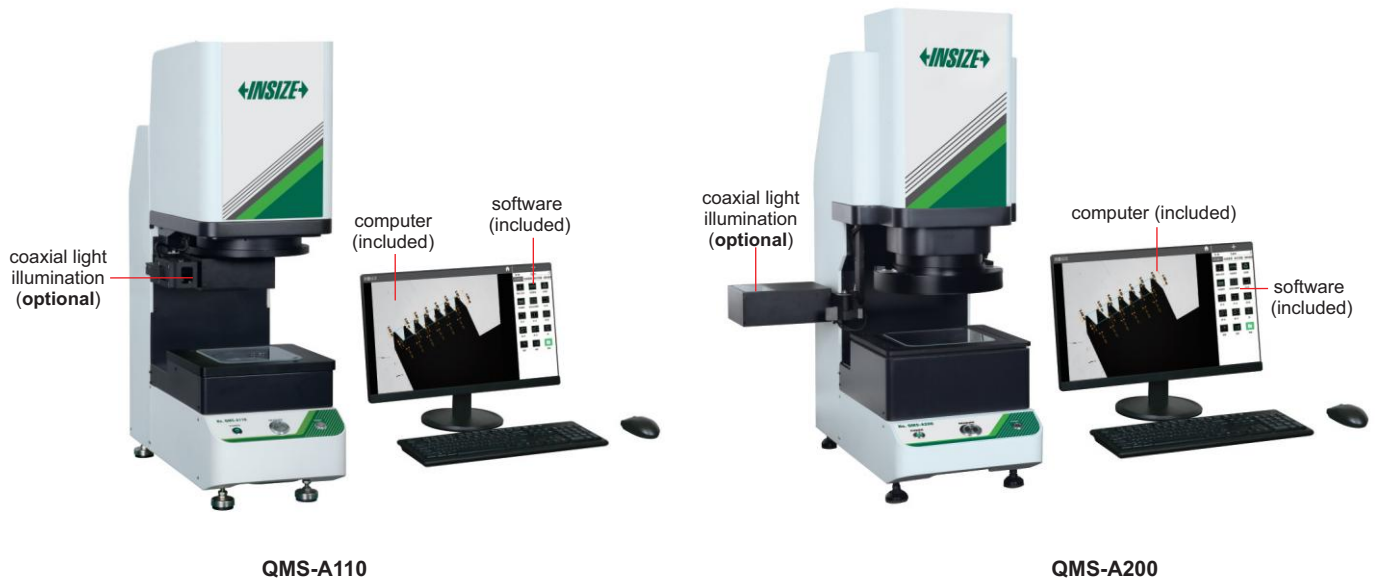


- Measuring result can be stored automatically. OK items and NG items can be counted automatically



NOTE: NOT SUITABLE FOR SMALL SIZES SUCH AS THREADS, CHAMFERS, ETC.

## QUICK MEASUREMENT SYSTEMS (WITHOUT STITCHING)



### SPECIFICATION

Code	QMS-A110	QMS-A200	
Optical lens	low-distortion lens, single-field telecentric Ø100mm	dual-field dual-telecentric low-distortion lens wide view field: Ø150mm small view field: Ø50mm	
View field range	100×80mm	wide view field 150×110mm	small view field 50×35mm
Measurement range (X×Y)	98×78mm	148×108mm	48×33mm
Measurement accuracy *	±3µm ①	±5µm ②	±2µm ③
Repeatability	±1µm	±1µm	±0.5µm
Max. weight of workpiece	5kg		
Measurement time	<2s		
Measurement data	2D measurement		
Power supply	220V, 50Hz, 600W		
Illumination system	back light	telecentric illuminator, green light	
	ring light	4-zone circular white high light circular (directional) low-angle green light (eletric)	
	coaxial light (optional)	vertical illuminator, white light	
Environmental requirement	temperature: 20°C±2°C, relative humidity: 30%~80%, vibration: <0.002g, less than 15Hz		
Dimension (L×W×H)	580×235×790mm	638×336×885mm	
Weight	40kg	60kg	

\* The optimum temperature is 20°C±1°C

- ① Within 80×64mm, on focal position and environment temperature at 20°C±1°C
- ② Within 120×88mm, on focal position and environment temperature at 20°C±1°C
- ③ Within 40×28mm, on focal position and environment temperature at 20°C±1°C

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- One or more workpieces can be measured by one step operation
- Place workpieces at any position
- Focus and measure automatically
- Measurement of 999+dimensions and 200+workpieces
- **QMS-A110** is suitable for measuring small flat parts
- **QMS-A200** is suitable for measuring flat parts with low precision requirements and small surface sizes



11.6" LCD (optional)

**STANDARD DELIVERY**

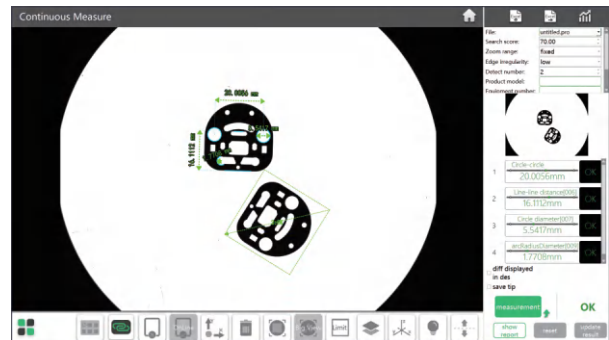
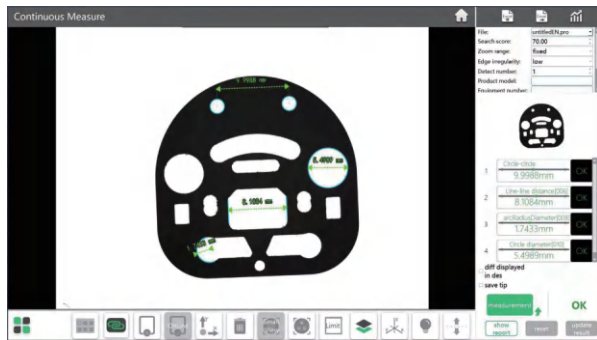
Main unit	1 pc
Computer	1 pc
Software	1 pc

**OPTIONAL ACCESSORY**

Coaxial light illumination	QMS-23-A3 (for QMS-A110) QMS-23-A4 (for QMS-A200)
Data transmission function of software	QMS-23-D1
CAD import function of software	QMS-23-C1
Foot-switch	QMS-43-FS1
11.6" LCD	QMS-23-B1 (must be installed in factory)

**Software (included)**

- Automatically measure widths, holes, rings, angles at the same time, simple and efficient



- Measuring result can be stored automatically. OK items and NG items can be counted automatically





## CNC VISION MEASURING SYSTEMS (STANDARD TYPE)



- Automatic edge-detection, focus, measuring, contour scanning, calibration, etc.
- Servo motors for X, Y, Z axis
- SPC function for large quantity measurement
- Measuring software is included (page 671~672)

### SPECIFICATION

Code	motorized zoom lens	ISD-V220ZA	ISD-V220ZHN	ISD-V270ZA	ISD-V270ZHN	ISD-V370ZA	ISD-V370ZHN
	manual zoom lens	ISD-V220CNCA	ISD-V220HN	ISD-V270CNCA	ISD-V270HN	ISD-V370CNCA	ISD-V370HN
Measuring range (X×Y×Z)		220×120×150mm	220×120×300mm	270×170×150mm	270×170×300mm	370×270×150mm	370×270×300mm
Stage size		450×280mm	450×280mm	500×330mm	500×330mm	606×466mm	606×466mm
Glass stage size		306×196mm	306×196mm	350×250mm	350×250mm	450×350mm	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)				≤(3.5+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		33.0X~208.6X (with manual zoom lens, on 24" monitor) 31.9X~188.7X (with motorized zoom lens, on 24" monitor)					
Camera		giga-bit network camera					
Illumination	surface	coaxial light, programmable segmented ring light					
	contour	adjustable LED light					
View field (diagonal length)		1.5~10.8mm					
Max. height of workpiece		150mm	300mm	150mm	300mm	150mm	300mm
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	760×600×1050mm	760×600×900mm	760×600×1050mm	970×670×940mm	970×670×1090mm
Weight		146kg	156kg	168kg	178kg	266kg	276kg

To be continued

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software flash disk (included)



laser probe (optional) measuring accuracy is 5µm

**STANDARD DELIVERY**

Main unit	1 pc
Software	1 pc
Computer	1 pc
24" display	1 pc
Len with coaxial light	1 pc
Controller	1 pc
Calibration glass chart	1 pc
Laser positioner	1 pc
Clay	1 pc
Anti-dust cover	1 pc



desk (optional)



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

**OPTIONAL ACCESSORY**

0.5X auxiliary objective	code: <b>ISD-V-OB05X</b> , working distance: 175mm magnification: 16.5~104.3X (with manual zoom lens, on 24" monitor), 16.0~94.4X (with motorized zoom lens, on 24" monitor)
2X auxiliary objective	code: <b>ISD-V-OB2X</b> , working distance: 36mm magnification: 66~417.2X (with manual zoom lens, on 24" monitor), 63.8~377.4X (with motorized zoom lens, on 24" monitor)
Probe	code: <b>ISD-V-PROBE</b> , includes Ø2mm and Ø3mm styli, Ø25mm calibration ball
Laser probe	code: <b>ISD-V-LASER</b>
Office software	code: <b>7313-OFFICE</b>
Desk	code: <b>ISD-V-DESK</b>

**SOFTWARE (INCLUDED)**

- Refer to page 671~672 for details

real-time image

XY/Z axis

light controller

magnification of selected points

measuring objects

measuring results

measuring tools

movement controller

measuring graphic

Detailed description: The screenshot shows the INSIZE software interface. On the left, a 'real-time image' window displays a circular field of view with a black cross-shaped object. Below this is a 'measuring objects' list with columns for object name, type, and status. In the center, a 'measuring results' table shows coordinates for the center of the object. To the right, a 'movement controller' panel includes 'XY/Z axis' coordinates and a 'light controller' with a 'Stop' button. A 'measuring graphic' window shows a magnified view of the cross with dimensions R1.4999 and D5.0017. A 'magnification of selected points' window shows a zoomed-in view of the cross's center.

## CNC VISION MEASURING SYSTEMS



computer is included

ISD-V500N

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

### SPECIFICATION

Code	ISD-V500N	ISD-V501N	ISD-V500HN	ISD-V501HN
Measuring range (X*Y*Z)	470×370×200mm	500×400×200mm	470×370×400mm	500×400×400mm
Stage size	786×636mm	846×696mm	786×636mm	846×696mm
Glass stage size	570×470mm			
Resolution of X/Y/Z axis	0.5µm			
Accuracy of X/Y axis	≤(2.5+L/200)µm (L is measuring length in mm)			
Repeatability of X/Y axis	2µm			
Objective	0.7X~4.5X (zoom)			
Working distance	92mm			
View field (diagonal length)	1.5~10.8mm			
Magnification	33.0X~208.6X (on 24" monitor)			
Camera	giga-bit network camera			
Illumination	surface	coaxial light, programmable segmented ring light		
	contour	adjustable LED light		
Max. height of workpieces	200mm		400mm	
Max. weight of workpieces	30kg			
Operation system	Windows 7/10			
Drive method	automatic			
Power supply	220V, 50/60Hz			
Dimension (L*W*H)	1270×1200×1870mm	1405×1260×1870mm	1270×1200×2070mm	1405×1260×2070mm
Weight	870kg	1000kg	900kg	1030kg

To be continued

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**STANDARD DELIVERY**

Main unit	1 pc
Video card with dongle	1 pc
Software disc	1 pc
Lens with coaxial light	1 pc
Controller	1 pc
Computer	1 pc
Calibration glass chart	1 pc
Laser positioner	1 pc
Clay	1 pc
Anti-dust cover	1 pc



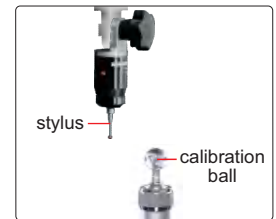
lens with coaxial light (included)



programmable segmented ring light (included)

**OPTIONAL ACCESSORY**

0.5X auxiliary objective	code: <b>ISD-V-OB05X</b> working distance: 175mm magnification: 16.5~104.3X (on 24" monitor)
2X auxiliary objective	code: <b>ISD-V-OB2X</b> working distance: 36mm magnification: 66~417.2X (on 24" monitor)
Probe	code: <b>ISD-V-PROBE</b> includes Ø2mm and Ø3mm styli, Ø25mm calibration ball
Office software	code: <b>7313-OFFICE</b>



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

**SOFTWARE (INCLUDED)**

- Refer to page 671~672 for details

The screenshot shows the INSIZE software interface with several key components labeled:

- real-time image:** The main window displays a circular target with two black lobes.
- X/Y/Z axis:** A coordinate system is visible in the top right corner.
- light controller:** A panel on the right side of the interface for controlling the light source.
- magnification of selected points:** A zoomed-in view of the target's center is shown in the bottom right.
- measuring objects:** The bottom left panel shows a list of measured features like ARC1, LK1, LK2, LK3, and LK4.
- measuring results:** The bottom center panel displays numerical data for the selected features.
- measuring tools:** A central toolbar contains various measurement and analysis tools.
- movement controller:** A panel on the right side for controlling the probe's movement.