



Pricis-IM series are programmable motorized stage video measurement system with autofocus function, speeds up throughput and improve repeatability. Each system built with granite base and column structure coupled with motorized XYZ axis ensures accuracy and stability.

### MACHINE FEATURES

Workstage made of granite with fixturing holes

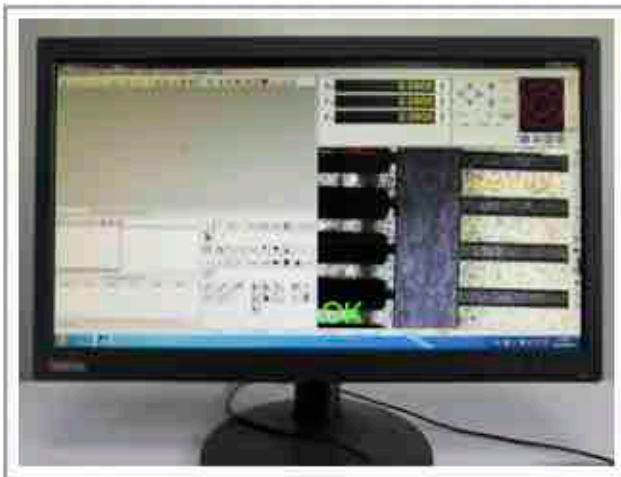


Automatic measurement with user friendly measurement program.

Programmable LED partition ringlight



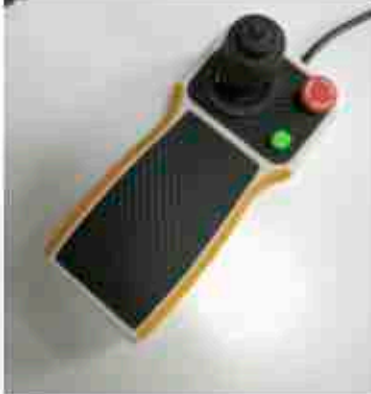
3 Axis joystick proportional speed control and emergency stop button.



### Measurement Software that make Simpler

With Image, Graphic, Result and Control windows makes it easier for user to measure parts easily. Capable of measuring Length, Width, Height, Angle, Diameter and etc. Generate marks dimensions for easier interpretation.

**3-AXIS JOYSTICK  
SPEED CONTROL**



**Z AXIS  
SERVO MOTOR**



**XY STAGE COUPLER  
WITH SERVO MOTOR &  
BALL SCREW**



**Z AXIS BALL SCREW  
DRIVETRAIN**



**OPTICAL ZOOM LENS**



**LED PARTITION  
SURFACE RINGLIGHT**



### FEATURES & BENEFITS

- Easy to use simple operation 3-Axis joystick allows user to maneuver the XY Stage and Z axis.
- Servo motor motion control on XYZ Axis ensures smoothness in motion.
- Programmable, automatic edge detection and autofocus.
- Low friction Precision Ball screw yields high mechanical efficiency.
- High resolution color camera couple with manual detented zoom lens. Mechanical positioning structure, high accuracy in zoom and repetitive positioning. Optical zoom range from 0.7x to 4.5x (Optional motorized zoomlens). With factory installed motorized zoomlens options, the software allows user to program and change magnification easily. High hardness allow material, for a long lifespan.
- High intensity programmable LED Illumination and partition ringlight. Once program, the lights automatically turns on, increase brightness and change sector according to the program.

### PANASONIC SERVO DRIVER AND MOTOR



Pricis-IM Series motion control uses Panasonic Servo Driver and Servo Motor for XYZ Axis for better performance

### LINEAR GUIDE RAIL AND CROSS ROLLER GUIDE RAIL



Pricis-IM Series XY Axis uses Linear guide rail that can withstand high load capacity with low friction, excellent response and high precision. Z Axis uses Cross Roller Guide Rail with extremely smooth motion and high rigidity.



### LED RINGLIGHT

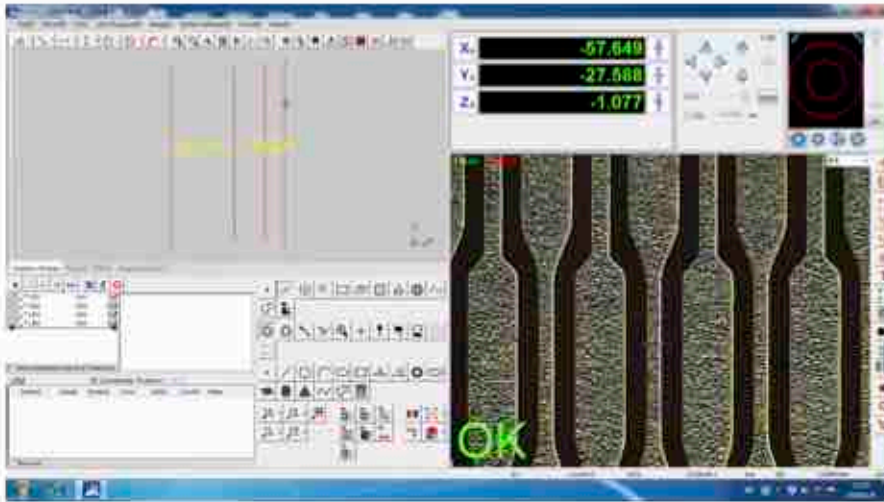


- Programmable LED Ringlight with 8 sectors.
- High intensity long life span.
- Software automatically control the illumination brightness and sectors during automatic measurement.

### MOTORIZED ZOOM LENS



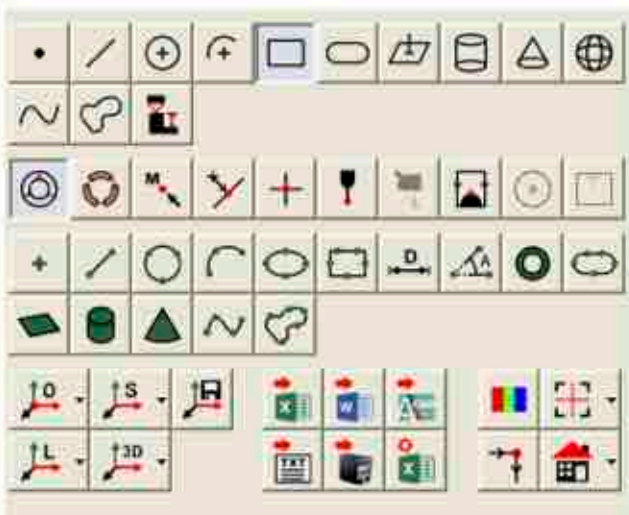
- Optional 6.5X motorized zoom lens with or without coaxial illumination at your choice.
- Magnification ratio 6.5:1 with a magnification range from 0.7x to 4.5x.
- Excellent performance, with high resolution, low distortion.
- High resolutions Color CCD Camera with superb crystal clear images.



With Ins-C Measurement Software you can easily create programs for the PRICIS IM-Series to automatically measure your parts. Pack with powerful features to measure most complex parts yet user friendly.

### Measurement Window Toolbox

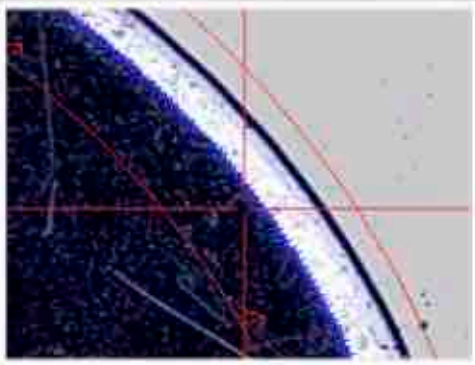
Includes functional icons allows user to measure or construct basic features such as point, line, circle, arc, box, slot, plane, curve and complex 3D shape such as cylinder, cone and sphere with optional touch probe.



### Touch Probe Options

Measuring features inaccessible by video such as the surface and sides of a features with wide range of optional stylus provides measurement.



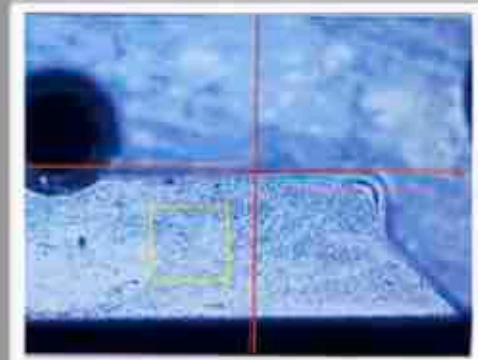


### EDGE DETECTION

Multiple weak edges can be measure with the directional search target and the contrast enhance by the partition ringlight illumination.

### FOCUS PLANE

Autofocus capture the surface and measure the height between two points or plane.

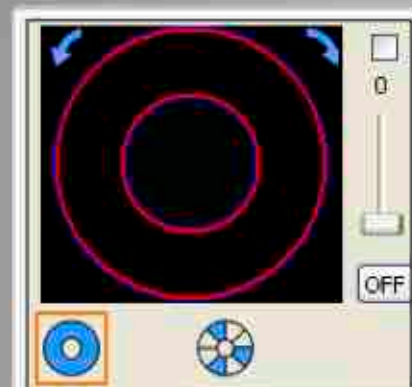


### SAVE AND RUN PROGRAM

Allows user to create a measurement program, save and run measurement program for part repeat measurement. Every steps will be recorded and can be edit. Reduce measurement time and minimize error.

### PROGRAMMABLE LED ILLUMINATION

Let you set intensity and on/off status for all illumination. The programmable lighting automatically changes status when running a routine, either it is on/off, different brightness or partial sector ringlight.







#### SPC DATA ANALYSIS

Data can be collected and analysis automatically with the build-in statistical process control capability. A selection of chart and graph is available, such as Raw Data, XBar-R, XMed-R, XBar-S, X-Rm Chart, CP, CPK.

#### DATA/IMAGE OUTPUT

Measurement Data and images can be export to pdf, words, excel and DXF format.

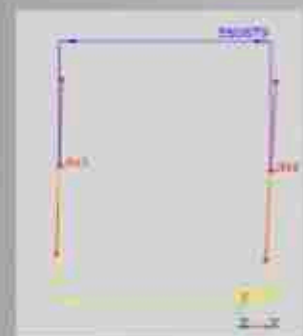
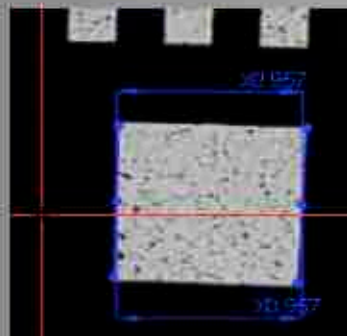


#### MOTION CONTROL

Maneuver the XYZ axis can be also be achieve with the software. All three axis is fully control by the user interface, all directions and speed are fully control by a click of a mouse.

#### TAG AND LABEL

Measurement lines appear in the video image or graphic image can be very confusing when several dimensions are measured on a part. All dimensions can be tag and label in the video image window and graphic window for user reference.



Measuring Unit	IM320	IM430	IM540
XYZ Travel (mm)	300x200x200	400x300x200	500x400x200
Dimensions (mm)	600x700x800	800x850x900	1100x1080x900
Weight (kg)	150	250	380

XY Stage	Mounted on linear guide rail coupled with ball screw.
Z Axis	Mounted on cross roller guide rail coupled with ball screw.
Worktable	Granite surface with fixturing holes stage glass and 25kg load capacity.
Motor Drive	Panasonic servo motor drive on XYZ Axis.
Scale Resolution (XYZ)	1um precision scale
Camera	850TVL, 1/3" High resolutions colour camera coupled to manual zoomlens. (Optional motorized zoomlens).
Optics	6.5:1, 0.7x-4.5x manual zoom lens (approx. 30-180X) on screen magnification with 19" LCD monitor. W/D 95mm, FOV: 7-1.1mm (Optional motorized zoomlens).
Optional lens	0.5x, 0.75x, 1.5x, 2.0x
Optional Adapter tubes	0.67x, 2.0x
Illumination	Programmable High Intensity LED backlight and partition ringlight. (Optional Coaxial Light)
Controller	Lenovo PC & LCD Monitor with Windows Operating System
Software	Ins-C Metrology Software.
Optional Touch Trigger Probe	Renishaw touch trigger probe with choice of ruby ball styli
Power	100-220 VAC, +/-5%, 50/60Hz, Single phase, 3A
Recommended Operating Environment	Temperature 20-25 degree Celcius +/-2 degree C/hr, Humidity 30-80% (non-condensing), vibration <0.002g below 15Hz
*Measuring Accuracy	XY* $E \leq 3.0 + L/200\mu m$ , Z* $E \leq 3.0 + L/100\mu m$ . (optional touch probe)

\*Where L - Length in mm with evenly distributed load in the standard measuring plane.  
Depending on load distribution and image contrast, accuracy may be less than standard accuracy. All optical accuracy specifications with standards artifact at maximum zoom lens setting.