Pricis
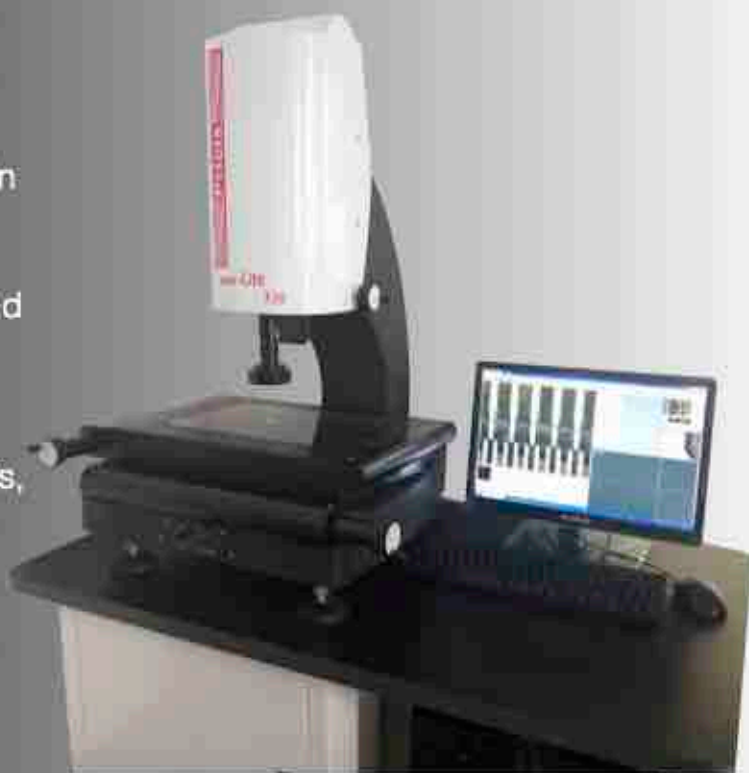## *um*-Lite *Series*

PRICIS *um*-Lite series is an easy to use manual two dimensional measurement system. Widely use in measuring components such as electronic parts, plastic injection molded parts, mechanical parts and etc.

um-Lite's zoom optics and color camera enables user easier confirmation of measurement points, with robust fully granite structure and workstage provide accuracy you expect in a manual measurement system.
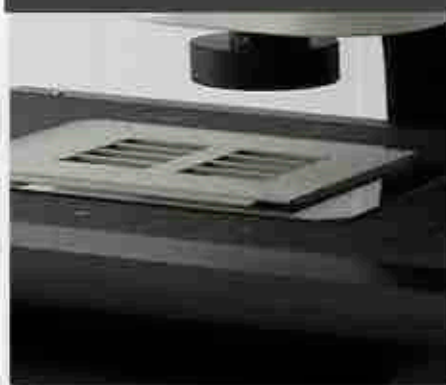
MACHINE FEATURES

ALL GRANITE BASE & COLUMN STRUCTURE

SEMI-AUTOMATIC MEASUREMENT WITH USER FRIENDLY MEASUREMENT PROGRAM.

TOUCH TRIGGER PROBE (OPTIONAL)

Pricis
um-Lite Series

Optical Zoom Lens

Granite Column

LED Illumination

Comfort Grip Knob

Rolling Ring Drive

XY Stage Quick Move

Embeded Illumination Controls

Granite Stage with Fixuring Holes

- Zoomlens Magnification ratio 6.5:1 with a magnification range from 0.7x to 4.5x.
- Color CCD Camera with superb crystal clear images. Excellent performance, with high resolution, low distortion.
- High resolutions High intensity long life span LED Ringlight and Backlight
- High efficiency rolling ring drive on XY axis, with just rolling bearings roll along a plain shaft virtually zero backlash and built-in overload protection, when it is overloaded, the nut will slip, not jam.
- XY Stage quick move allows XY stage slide freely by flipping the lever.
- Granite work stage built-in with fixturing holes allows fixture secure onto the stage.
- Large comfort grip knobs, enables user to control the axis movement precisely.
- All granite base and column structure ensures stability.

Pricis
um-Lite *Series*

CROSS ROLLER GUIDE RAIL

Pricis-um-Lite Series XYZ Axis uses Cross Roller Guide Rail with extremely smooth motion and high rigidity.

X AXIS SLIDE

Y AXIS SLIDE

Z AXIS SLIDE

Pricis
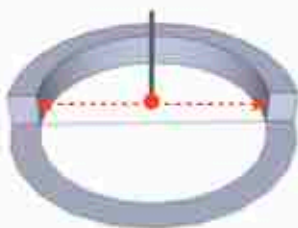## *um-Lite Series*

OPTIONS FOR EXPANDING MEASUREMENT

Optional motorized Z-Axis

With the motorized Z-Axis, the Z-Axis can move up and down without adjusting the manual knobs to focus and Z Height measurement.
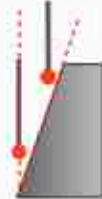
Optional Touch Probe

Pricis um-Lite series is touch-probe ready to accomodate optional touch trigger probes. It provides 3D shape parts measurement where vision can't be use. Such as internal diameter, draft angle, cylinder, cone, plane, etc.
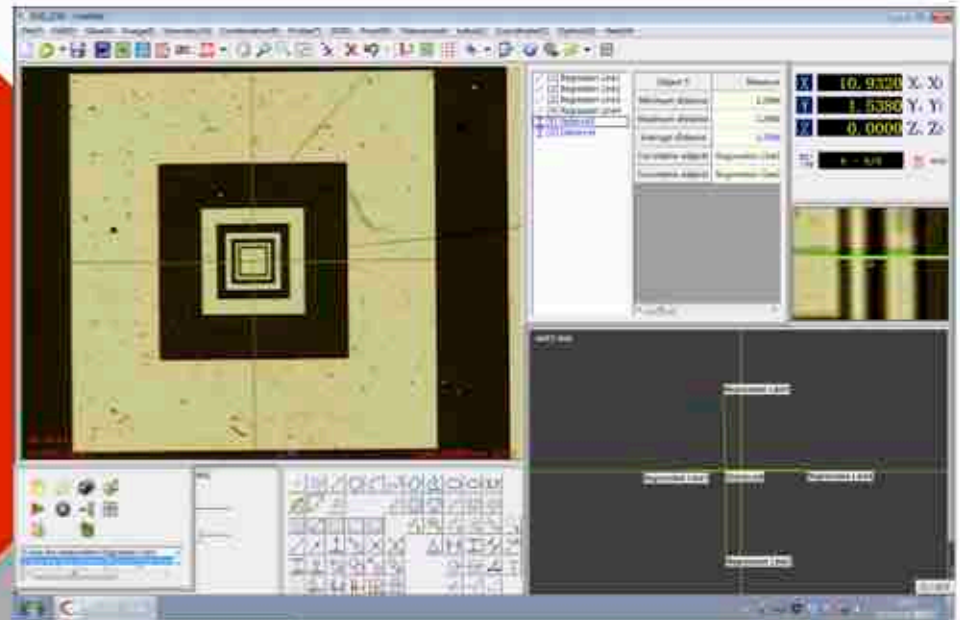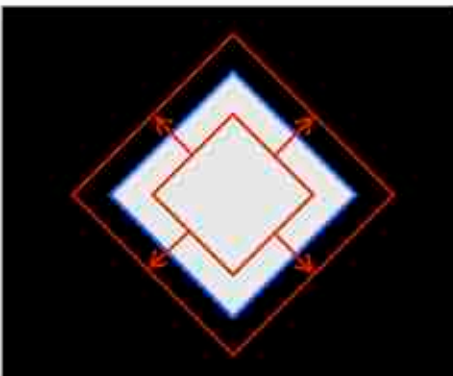
Internal diameter

Draft angle

GNS VISION

www.gnsvision.com

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Pricis
um-Lite *Series*

EVS 2.5D Measurement Software is design for Pricis *um*-lite series semi automatic video measurement system. Full color imaging with graphical models display, result windows make it User-friendly to measure dimensions easily.

Auto Feature Detection

Edges of a feature such as Point, Circle, Line, Arc, B-spline, Rectangle, Polygon, Ellipse, Slot can be automatically detect with this just a simple click.
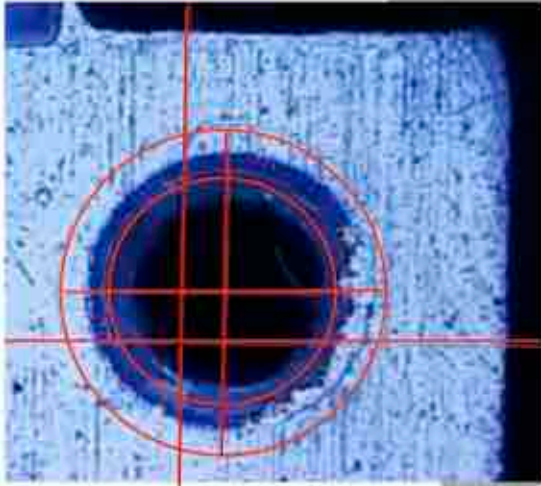

Icon Toolbox

There are icons let you measure or contruct a point, midpoint, diameter, radius, width, intersections, angle, perpendicularity, midpoint, etc.There are also icon let you set origin, axis alignment and rotation.

GNS VISION

www.gnsvision.com

Weak Edge Detection
Feature with weak edges are optimized and captured with surface light

Burr
Edge Detection
Features with burr are optimized
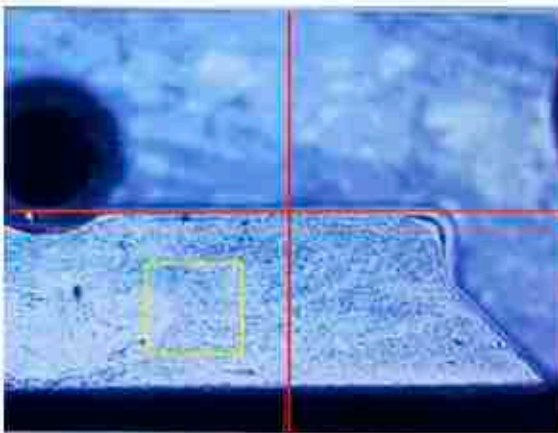

Save and Run program
Allows user to save and run measurement program for part repeat measurement. Reduce measurement time and minimize error.
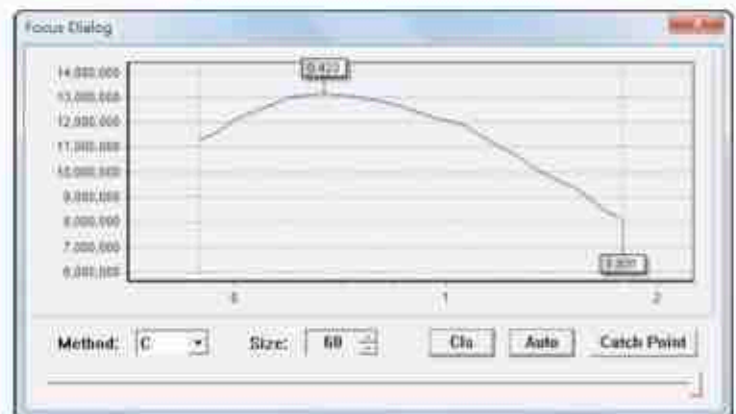
Height Measurement (Optional Z Axis)
Focus the surface of two plane, the software will analyse and determine the Z Distance.

4 Auto line measurement Regression Line4
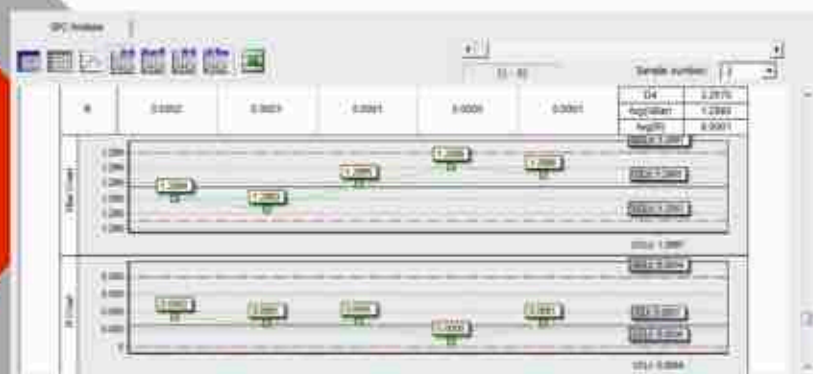5 Auto two lines' distance Distance3 (Regression

Image Window

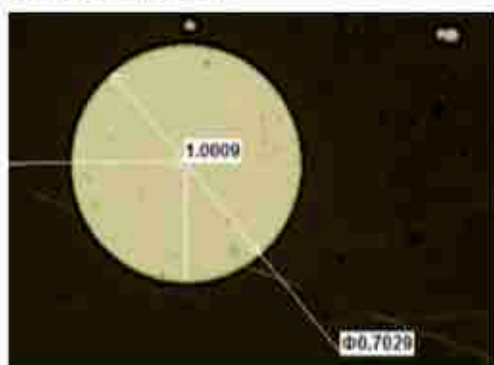*Focus Dialog*

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.
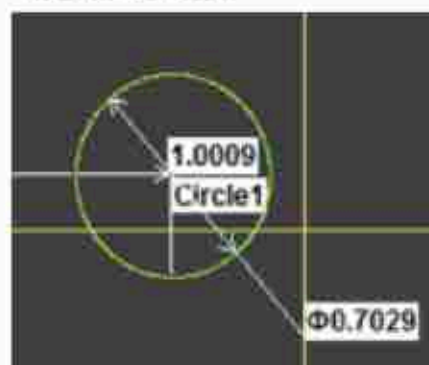

Data/Image Output

Measurement Data and graphical image can be output to pdf, words, excel and DXF format(if installed).

Graphical model

Image Window and Model Window are tag with Dimensions and Label. Features color can be preset for user reference.

Image Window

Model Window

Pricis
um-Lite Series

5 DIFFERENT SIZE TO SUIT YOUR NEEDS

210/320

430

540/650

Measuring Unit	PRICIS um-Lite210	PRICIS um-Lite320	PRICIS um-Lite430	PRICIS um-Lite540	PRICIS um-Lite650
XYZ Travel (mm)	200x100x150	300x200x200	400x300x200	500x400x200	600x500x200
Dimensions (mm)	600x600x800	700x700x900	900x800x900	1100x1200x1700	1200x1300x1700
Weight Approx. (kg)	120	150	250	450	560

XYZ Axis	Rolling Ring linear motion guide rail with positioning knobs and with free movement lever for X and Y Axis. Leadscrew linear guide rail with positioning knob for Z Axis. (Optional motorized Z Axis with autofocus function)
Worktable	Granite surface with fixturing holes, stage glass and 25kg load capacity.
Scale Resolution (XY)	1.0um (Optional Z Axis)
Camera	720 TVL, 1/3" format High Resolution Color CCD Camera
Optics	6.5:1, 0.7x-4.5x manual zoom lens (approx. 30-180X) on screen magnificaition on 19" LCD monitor). W/D 95mm, FOV: 7-1.1mm
Optional lens	0.5x, 0.75x, 1.5x, 2.0x
Optional Adapter tubes	0.67x, 2.0x
Illumination	Adjustable LED ringlight & backlight
Controller	PC with Windows Operating System
Software	EVS 2.5D Measurement Software. (Optional Ins 3D CNC Metrology Software for motorized Z Axis)
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<=3.0+L/200um

*Where L - Length in mm with evenly distributed 5kg load in the standard measuring plane. Depending on load distribution, accuracy at maximum rated load may be less than standard accuracy. All optical accuracy specifications at maximum zoom lens setting. X/Y axis actifact: Standard linear glass scale. Z axis artifact Standard Gage Block.