



Digital Image 2D Measuring System

MODEL EX-MiniY

PROTEC high-performance series of 2D coordinate measuring system became downsize and compact to mini-size. It can be used to measure dimensions, inspect hole pitch, and measure coordinates for wide range of relatively small sized plate products such as printed circuit boards, liquid crystal glass substrates, precision photomasks, various films, block copies, several types of printed matter. Measured data can be printed, and also converted to Excel and CAD/CAM.



■ Major characteristics

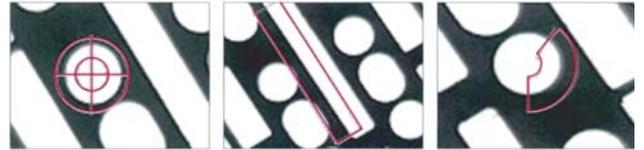
- Taking images for measuring : Taking images with view from CCD camera and microscope
- Easy to operate : Featuring highly accurate measuring mode, with cross line for basic measure
- Edit images : Easy to edit images such as indicating failure points, or insert texts.
- No calibration : Not necessary to calibrate for each magnification Easy to change scales
- Conversion function : Function to convert measured data into Excel form and reports

PROTECENG CO.,LTD.

● Measuring software display



- Equipped with edge sensor
By mouse-clicking on measuring points, automatic measurement can be made, thus eliminating errors depending on inspectors.



Measuring circle Measuring line Measuring circular arc

- Basic measurements such as points, lines, circles and circular arcs (up to 500 points)
- Indirect measurements such as distance, angle midpoint
- Coordinate measurements such as axial adjustment and origin shift
- Rerunning by invocation
- Contents of system sets
 - Stereoscopic microscope (trinocular, object lens from 0.7 to 4.5 times, eyepiece 10X)
 - CCD camera
 - Ring light device
 - Software
 - USB capture card
*PC is not included

- Display failure points. Edit images such as inserting texts.
- Featuring conversion feature of measured data into Excel form and making reports.
- No calibration necessary in each magnification. Easy to change scales.

■ Main specification

Model	EX-MiniY	
Measuring range (actual visibility)	Approx. 2.0 × 1.7mm (x4.5) ~ approx. 1.5 × 12mm (x0.75)	
Minimum indication value	1 μm	
Environmental condition	Temperature	15 ~ 40°C
	Humidity	30~ 80%
Image detection	High resolution CCD color camera	
Lighting system	Ring lighting system	
Zoom lens-barrel	x0.75~ x4.5 (Approx. 9~80x in using 15inch monitor)*1	
PC System requirements	Windows XP on board personal computer (PC is not included) CPU: Pentium II, HDD 1.2 GB, 128MB memory (minimum condition)	
Power source	AC100V, 10A	
Mass	Approx. 6Kg*2	
Dimensions	200 (W) × 250 (D) × 450mm (H) *3	

*1: Magnifications quoted here are values by calculation, and not correspondent with actual magnification rates.

*2: Main unit weight only *3: PC and monitor are not included.

* Specifications and design details may be subject to change.

Manufacturer :



for more information: