



# Digital 2D Coordinate Measuring Machine

## MODEL EX-4050Y/7070Y

PROTEC 2D coordinate measuring machine series are highly reliable devices which hold precision and operability in high regard as their primary purposes. 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, screen masks, various films, block copies, several types of printed matter. Measured data can be printed, and also converted to Excel and CAD/CAM.



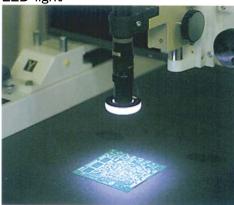
#### Major characteristics

Fine traveling device	Equipped with fine traveling device for XY axis with good operability	
Easy to operate	rate Featuring edge sensor, thus eliminating errors by inspectors Excellent system environment allowing free editing and operation	
Speedy and efficient  Measured data can be transferred to Excel files to save time in transcription. Factors can be graphically displayed for edit and comparison on CAD/CAM. Data can be saved in CAD DXF files.		

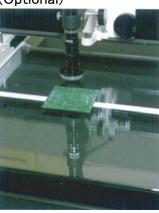
Zoom microscope (0.75~4.5x)



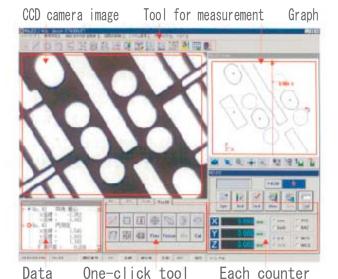
LED light



Transmitted illumination (Optional)



### Measuring Software Display (17 inch TFT)



#### Graphic display



- O Draw figures at the same time of measurement
- O Recalculation can be done by simply clicking measured parts on the graph instead of numbers of result recalculations.
- O Graphs can be saved in DXF or BMP files, also can be transferred to CAD/CAM for editing.

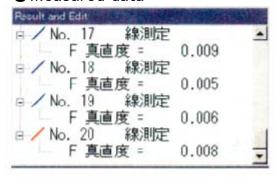
#### Equipped with edge sensor

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



- OBasic measurements such as points, lines, circles and circular arcs (up to 500 points)
- OIndirect measurements such as distance, angle midpoint
- OCoordinate measurements such as axial adjustment and origin shift
- ORerunning by invocation

#### Measured data



- O Output of measured data includes geometric calculated value such as roundness other than X and Y axial lines.
- O Shortest distance and longest distance can be calculated.
- O Each measured data has measurement numbers attached. Recalculations are easy by inputting the measurement numbers in result recalculation mode.

#### Main specification

Model		EX-4050Y	EX-7070Y	
Measuring range		400 × 500mm(XY axis)	700 × 700mm(XY axis)	
Table size		500 × 800mm(XY)	1000 × 1200mm(XY)	
Minimum indication value		1 μ m		
Measurement accuracy		5+5L/1000 μ m, 20°C±1°C		
Method of operation		Manual		
Sliding area		LM guide		
Sensor		Linear encoder		
Environmental condition	Temperature	15~40°C		
	Humidity	30~80%		
Image detection		High resolution CCD color camera		
Lighting system		LED epifluorescence lighting system		
Zoom lens-barrel		x0.75~x4.5 (Approx. 23.6~152x in using 17inch monitor)*1		
PC		Windows XP on board personal computer included		
Monitor		17inch liquid crystal monitor		
Printer		A4 Color printer		
Power source		AC100V, 10A		
Mass		Approx. 250kg*2	Approx900Kg*2	
Dimensions		720(W) × 800(D) × 1180mm(H)*3	1350(W) × 1200(D) × 1160mm(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 infomation: