

Quick Image Non-contact 2D Vision Measuring System

- This series of manual 2D vision measuring machines offers high-efficiency measurement by employing a telecentric optical system that has a deep focal depth and a wide view monitor.
- The stitching function enables the entire display of a large workpiece so that highly accurate and speedy measurement can be performed.
- A model equipped with a motorized stage has been added to the series to offer easy and comfortable stage operation.
- A single click enables multiple measurements in one display. A batch measurement can be applied to multiple workpieces in the display after executing a pattern search based on the workpiece position.
- This series is equipped with a 3-megapixel color camera. Even with low magnification, high repeatability can be obtained.
- The choice of five stage sizes makes it easy to choose a machine to suit the user's application.
- The video window automatically displays the measurement data, which enables quick verification.



Refer to the **QUICK IMAGE** Series Brochure (E14009) for more details.



QI-C2017D



A motorized stage

SPECIFICATIONS

Model No.	Manual stage model						Motorized stage model		
	0.2X 0.5X	QI-A1010D	QI-A2010D	QI-A2017D	QI-A3017D	QI-A4020D	QI-C2010D	QI-C2017D	QI-C3017D
Measuring range (XxY)		100x100 mm	200x100 mm	200x170 mm	300x170 mm	400x200 mm	200x100 mm	200x170 mm	300x170 mm
Effective stage glass size		170x170 mm	242x140 mm	260x230 mm	360x230 mm	440x232 mm	242x140 mm	260x230 mm	360x230 mm
Maximum stage loading*		Approx. 10 kg		Approx. 20 kg		Approx. 15 kg	Approx. 10 kg	Approx. 20 kg	
Main unit mass		Approx. 65 kg	Approx. 69 kg	Approx. 150 kg	Approx. 158 kg	Approx. 164 kg	Approx. 72 kg	Approx. 153 kg	Approx. 161 kg

* Does not include extremely offset or concentrated loads

Model No.	QI-A/QI-C		QI-B
View field	32x24 mm		12.8x9.6 mm
Measurement mode	High resolution mode/Normal mode* ¹		
Travel range (Z axis)	100 mm		
Vision measuring accuracy	Measurement accuracy within the screen* ²	High resolution mode Normal mode	±2 μm ±4 μm
	Repeatability within the screen (±σ)* ³	High resolution mode Normal mode	±1 μm ±2 μm
	Measurement accuracy (E _{1xV})* ²	±(3.5 + 0.02L) μm L=arbitrary measuring length (mm)	
Monitor magnification* ⁴	7.6X		18.9X
Optical system	Magnification (Telecentric Optical System)	0.2X	
	Depth of focus	High resolution mode	±0.6 mm
		Normal mode	±11 mm
Working distance	90 mm		
Camera	3 megapixel, CMOS color camera (1/2 in)		
Illumination	Transmitted light	Green LED telecentric illumination	
	Co-axial light	White LED	
	Ring light	4-quadrant white LED	
Power supply	AC100 to 240 V 50/60 Hz		
Accuracy guaranteed temperature	20±1 °C		

*¹ Patent registered (Japan)

*² Inspected to Mitutoyo standards by focus point position.

*³ The measuring accuracy is guaranteed to be accurate within the depth of focus.

*⁴ For 1X digital zoom (when using a 22-inch-wide monitor)