Vision Measuring Systems

Vision measuring systems for multipurpose use

QV Active
CNC Vision Measuring System

SMS Smart Measuring System

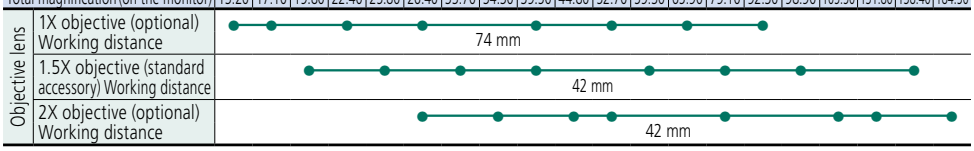
MeasurLink® ENABLED
Data Management Software by Mitutoyo

- Cost effective, multifunction, CNC Vision Measuring System.
- Usability has been improved by adopting a color camera and 8-step zoom optics.
- A touch-probe model can seamlessly perform non-contact and contact measurement.
- The zoom ratio of 7X (14X at maximum by changing the fixed-magnification objective lens) enables a wide range of inspection from wide view measurement at low magnification to micro-measurement at high magnification.
- The 74 mm maximum working distance (1X optional objective) promotes safe working by reducing the risk of collision, and allows greater freedom in fixture design.

QV Active 404

From wide view measurement to micro-measurement

Optical magnification	0.5X	0.65X	0.75X	0.85X	0.98X	1X	1.28X	1.3X	1.5X	1.7X	2X	2.25X	2.5X	3X	3.5X	3.75X	4X	5X	5.25X	7X
View field (mm) Horizontal (H)	13.60	10.46	9.07	8.00	6.94	6.80	5.31	5.23	4.53	4.00	3.40	3.02	2.72	2.27	1.94	1.81	1.70	1.36	1.30	0.97
View field (mm) Vertical (V)	10.80	8.31	7.20	6.35	5.51	5.40	4.22	4.15	3.60	3.18	2.70	2.40	2.16	1.80	1.54	1.44	1.35	1.08	1.03	0.77
Total magnification (on the monitor)	13.20	17.10	19.80	22.40	25.80	26.40	33.70	34.30	39.50	44.80	52.70	59.30	65.90	79.10	92.30	98.90	105.50	131.80	138.40	184.50



Note: The total magnification indicates the magnification on the monitor when the size of the **QVPAK** video window is 178.8×143.0 mm (default).

SPECIFICATIONS

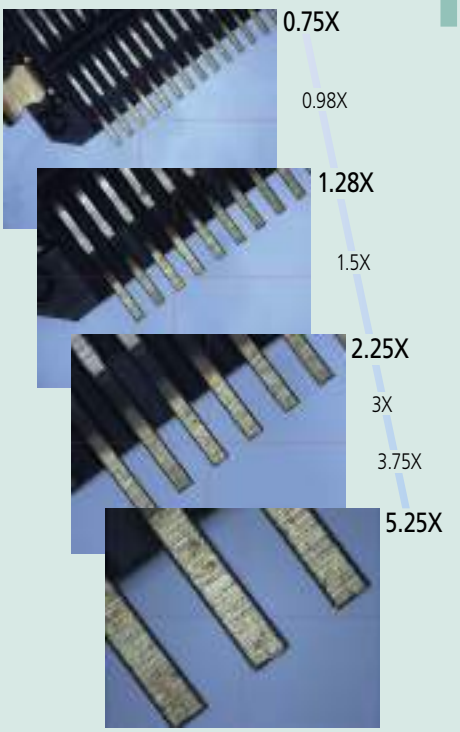
Model No.		QV Active 202	QV Active 404
Type		Standard model	Standard model
Measuring range (X×Y×Z)		250×200×150 mm (250×200×118 mm: when 1X objective is used)	400×400×200 mm (400×400×168 mm: when 1X objective is used)
Observation unit		Zoom unit (8 positions)	
Imaging device		Color CMOS camera	
Vision measuring accuracy*	E_{1X}, E_{1Y}	(2 + 3L/1000) µm	
	E_{1Z}	(3 + 5L/1000) µm	
	E_2	(2.5 + 4L/1000) µm	
	Accuracy guaranteed with optics specified	Objective: 1.5X, Optical magnification: 5.25X	
Touch-trigger probe measuring accuracy*	E_{1X}, E_{1Y}, E_{1Z}	—	—
Accuracy guaranteed temperature		20±1 °C	20±1 °C

* Inspected to a Mitutoyo standard. L=length between two arbitrary points (mm)

SMS Smart Measuring System
An online system to monitor the operational and mechanical statuses of measuring machines. This allows you to grasp the state of a process flow from the operational status of measuring machines within a production process.

MeasurLink® ENABLED Data Management Software by Mitutoyo
Products equipped with the measurement data output function can be connected to the measurement data network system MeasurLink® (refer to page A-25 for details).

PROPRIETARY INSPECTION CERTIFICATE
An inspection certificate is supplied as standard. Refer to page U-9 for details.



Refer to the **QUICK VISION Active** Series Brochure (**E14022**) for more details.

K

Mitutoyo reserves the right to change any or all aspects of any product specification, including prices, designs and service content, without notice.