

# VIEW Benchmark™ 624

## A Large Transport, 3-Axis Measurement System

The VIEW Benchmark 624 from QVI® is a large capacity, fully automatic, 3-axis dimensional measuring system.

The VIEW Benchmark 624 features a moving bridge and optics allowing the part being measured to remain stationary at all times.

- Massive granite base for stability
- Moving bridge design creates an open work envelope for easy access to the measurement area
- High precision single or dual magnification fixed lens optical system

	X	Y	Z
Travel (mm)	624	624	150



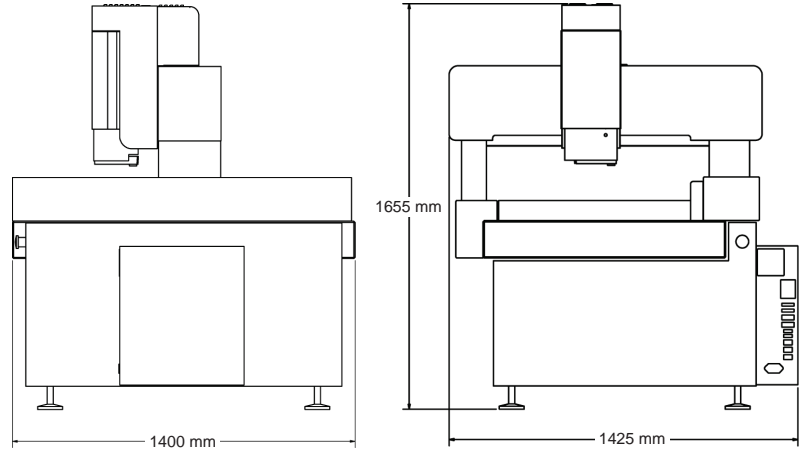
# VIEW Benchmark™ 624

## Metrology Software:

- VIEW Metrology Software (VMS)
- Optional: Elements® metrology software
- Optional: Measure-X® metrology software

## Available Optional Software Modules:

- Area Multi-Focus
- Continuous Image Capture (CIC)
- Advanced image filtering, image stitching, custom UI
- MeasureFit® Plus
- SmartProfile® 3D GD&T evaluation software
- VMS Offline workstation software
- Digital I/O



Uncrated: 930 kg

	Standard		Optional	
X,Y,Z Travel (mm)	624 x 624 x 150		624 x 624 x 200	
X,Y,Z Scale Resolution	0.5 μm		0.1 μm	
Stage Drive System	DC Servo Motor X,Y,Z; Single Y-axis drives and single Y-axis scales		Dual Y-axis drives and dual Y-axis scales	
Max Velocity	X,Y - 200mm/sec; Z - 100 mm/sec			
Max Recommended Load	50 kg load evenly distributed on glass 100 kg load evenly distributed on observation platform			
Imaging Optics	Dual magnification, fixed lens optics with field interchangeable front lens. VIEW 2.5X front lens included as standard.		Single magnification, fixed lens optics with factory configurable back tube and field interchangeable front lens. VIEW 1X back tube and 2.5X front lens included as standard.	
Front Lens (Field Interchangeable)	Lens	FOV (mm)	Lens	FOV (mm)
	VIEW 0.8X	Low: 8.34 x 6.23 High: 1.91 x 1.43	VIEW 0.8X	8.34 x 6.23
	VIEW 1X	Low: 6.46 x 4.82 High: 1.59 x 1.19	VIEW 1X	6.46 x 4.82
	VIEW 2.5X	Low: 2.78 x 2.07 High: 0.64 x 0.48	VIEW 2.5X	2.78 x 2.07
	VIEW 5X	Low: 1.35 x 1.01 High: 0.31 x 0.23	VIEW 5X	1.35 x 1.01
	VIEW 10X	Low: 0.69 x 0.52 High: 0.16 x 0.12	VIEW 10X	0.69 x 0.52
Metrology Camera	1.4 megapixel (1392 x 1040), 1/2-inch, digital, monochrome		1.4 megapixel (1392 x 1040), 2/3-inch, digital, monochrome 2.0 megapixel (1628 x 1236), 1/2-inch digital, monochrome *Other camera options available by request	
Illumination	Programmable LED illumination system for coaxial through-the-lens surface light and below-the-stage backlight		Multi-color programmable ring light with motorized incidence angle control; Grid autofocus system	
Sensor Options			Through-the-lens (TTL) laser Spectra Probe white light range sensor Off-axis triangulation laser	
Measurement Modes	High Speed Move and Measure (MAM)		Continuous Image Capture (CIC)	
System Controller	Quad core processor, WIndows® 7 Operating System and on-board networking and communication ports			
Controller Accessory Package	3-axis joystick for manual stage control, with stop/start button		Single LCD flat panel display, computer keyboard and mouse Dual LCD flat panel displays, computer keyboard and mouse Integrated, adjustable operator workstation	
Power Requirements	115/230 VAC, 50/60 Hz, 1-Phase, 1000W			
Rated Environment	Temperature: 18°-22° C, stable to ± 1° C   Relative Humidity: 30% - 80%   Vibration below 15Hz: <0.0015g			
XY Area Accuracy <sup>1,2,3,4,5</sup>	E <sub>z</sub> : (5.0+5L/1000) μm		E <sub>z</sub> : (3.0+5L/1000) μm with dual scale and drive option on Y-axis	
Z Linear Accuracy <sup>1,2,4,5</sup>	E <sub>x</sub> : (2.0+8L/1000) μm			
Notes: All specifications apply to a thermally stable machine and a certified artifact at 20°C	1. Maximum rate of temperature change: ±1° C/Hour   2. Maximum vertical temperature gradient: 1° C/Meter   3. Measured in the standard measuring plane. The standard measuring plane is defined as a plane that is within 25 mm of the worktable surface.   4. Accuracy specifications applicable to standard and optional optical configurations with 2.5X or higher objective lens magnification at the highest available magnification setting.   5. E <sub>x</sub> , Z axis linear and E <sub>z</sub> , XY area accuracy standards are described in QVI Publication Number 790762.			

# VIEW

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