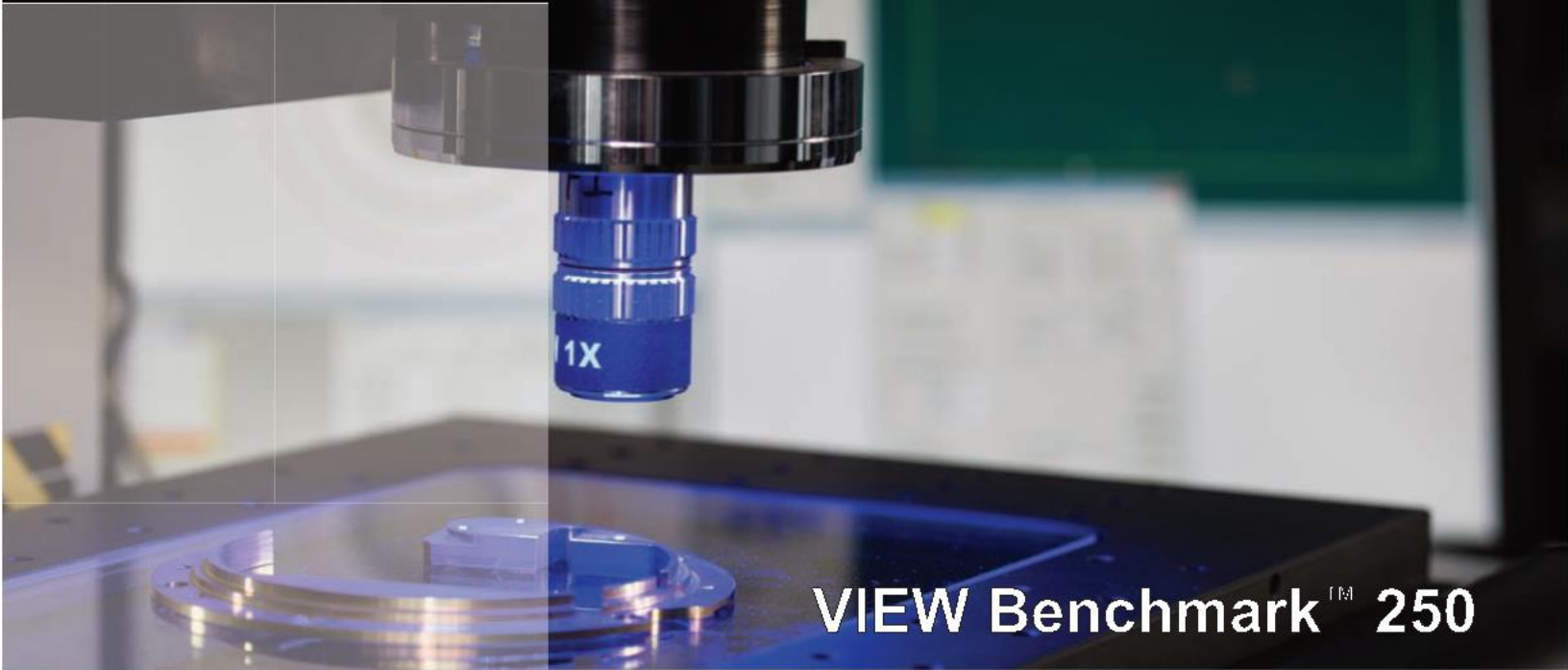




VIEW Benchmark™ 250

A compact, high accuracy dimensional metrology system

The VIEW Benchmark 250 from QVI® delivers high performance and reliability in a compact, benchtop package. Its advanced optics, illumination, image processing capabilities and available through-the-lens laser make it a world-class metrology system.

The VIEW Benchmark 250 provides precision measurements in the Q/A laboratory or on the production floor.

- ☐ High-precision single or dual magnification fixed lens optical system
- ☐ Advanced image processing for high speed, accuracy and precision
- ☐ Choice of powerful metrology software and data analysis tools

	X	Y	Z
Travel (mm)	300	150	150

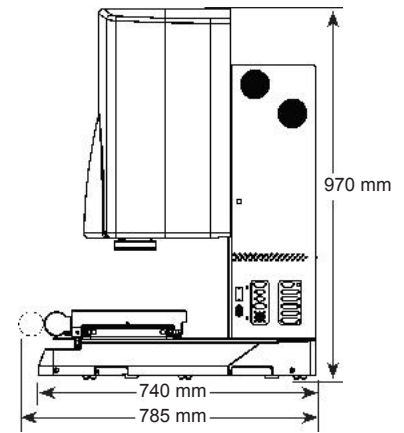
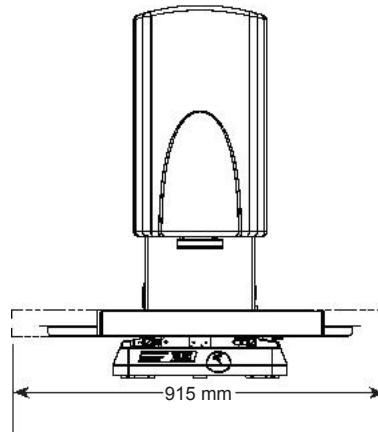


Metrology Software:

- ☐ VIEW Metrology Software (VMS)
- ☐ Optional: Element8 metrology software
- ☐ Optional: Measure-X metrology software

Available Optional Software Modules:

- ☐ Area Multi-Focus (AMF)
- ☐ 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: 141 kg* | Crated: 312 kg*

*System weight (without computer)

	Standard		Optional	
X,Y,Z Travel (mm)	300 x 150 x 150		300 x 150 x 200	
X,Y,Z Scale Resolution	0.1 μm		0.05 μm (dual scales for X-axis)	
Stage Drive System	DC Servo Motor, X,Y,Z			
Max Velocity	X,Y - 150 mm/sec Z - 100 mm/sec			
Max Recommended Load	25 kg			
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
	VIEW 25X	Low: 0.28 x .021 High: 0.06 x 0.05	VIEW 25X	0.28 x 0.21
Back Tube (Factory Installed)			VIEW 2X back tube (single magnification optics only)	
Metrology Camera	1.4 megapixel (1392x1040), 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	
Power Requirements	115/230 VAC, 50/60 Hz, 1-Phase, 700W			
Rated Environment	Temperature:18°-22° C,stable to ± 1° C Relative Humidity: 30%-80% Vibration below 15Hz:<0.0015g			
XY Area Accuracy (at 20°C) ^{1,2,3,4,5,6}	E _z : (1.8+6L/1000) μm		E _z : (1.0+6L/1000) μm (requires high resolution scale option)	
Z Linear Accuracy (at 20°C) ^{2,5,6}	E _x : (2.0+5L/1000) μm		E _x : (1.2+5L/1000) μm (with TTL laser and 5X lens)	
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. At rated velocity with evenly distributed load of 5 kg. Depending on load distribution, accuracy at higher loads may be less than standard accuracy. 4. Measured in the standard measuring plane. The standard measuring plane is defined as a plane that is within 25 mm of the worktable surface. 5. Accuracy specifications applicable to standard and optional optical configurations with 2.5X or higher objective lens magnification at the highest available magnification setting. 6. E_x Z axis linear and E_xXY area accuracy standards are described in QVI Publication Number 790762.			

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