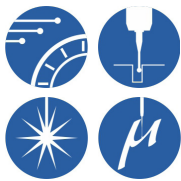


# SmartScope ZIP<sup>®</sup> Advance 250

- *High resolution positioning* – 0.05 µm scales and dual X-axis scales provide extremely high-resolution positioning
- *Sharpest video image* – AccuCentric<sup>®</sup> Zoom 70 lens system with high-resolution digital metrology camera and three light sources to provide the sharpest image fidelity
- *Advanced sensor capability* – Optional high resolution sensors for specialized measurements
- *State-of-the-art software* – Choose from a variety of powerful QVI metrology, productivity and offline software applications

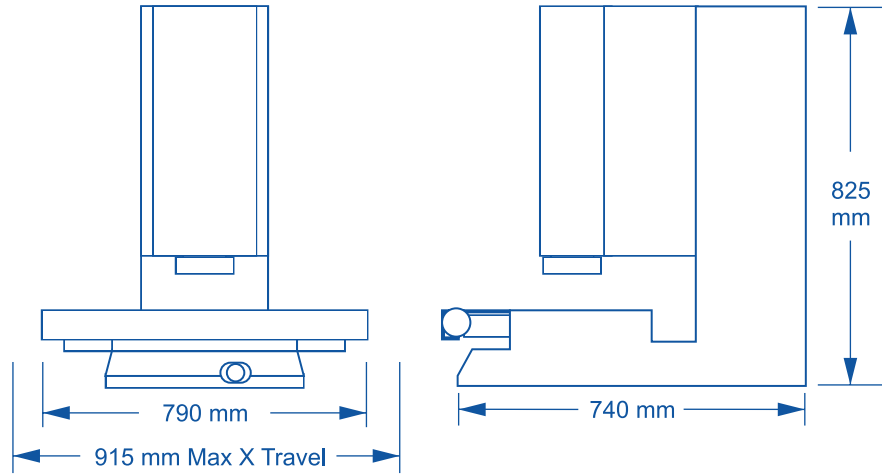
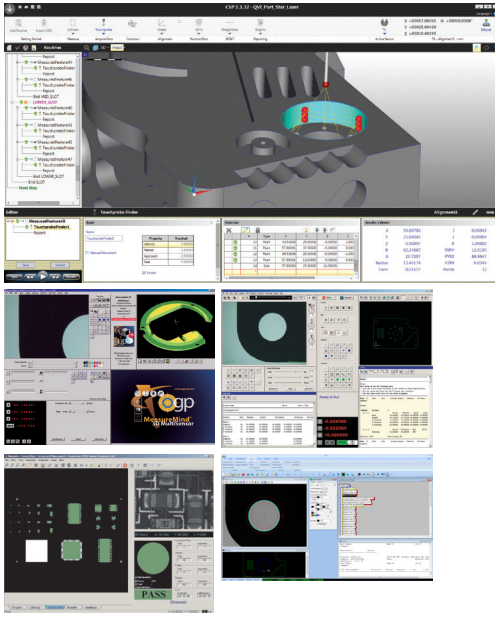
## High Performance Dimensional Measuring System with Advanced Sensor Capability



Axis	Travel (mm)
X axis	300
Y axis	150
Z axis	200



# SmartScope ZIP<sup>®</sup> Advance 250



Choose the QVI metrology software best suited to your manufacturing setting — 3D CAD-based ZONE3<sup>®</sup>, MeasureMind<sup>®</sup> 3D, Measure-X<sup>®</sup>, VMS<sup>™</sup> or Elements<sup>®</sup>.

Machine Weight: 120 Kg  
Crated Weight: 280 Kg

	Standard	Optional
XYZ travel	300 x 150 x 200 mm	
XYZ scale resolution	0.05 µm, with dual X scales	
Drive system	DC servo drives with 4-axis control (X,Y,Z & zoom); fine pitch Z-axis drive; multifunction handheld controller	
Worktable	Hardcoat anodized, with fixture holes, removable stage glass, 25 kg recommended max load	
Maximum stage velocity	X,Y 150 mm/sec; Z 25 mm/sec	
Optics	AccuCentric <sup>®</sup> Zoom 70 auto-calibrating lens system; 1.0x front replacement lens; 1.0x adapter tube; 2.0x lens attachment	0.5x, 0.75x, 1.5x lens attachments; 1.0x LWD (not for use with Vu-Light <sup>™</sup> ), 2.5x, 5.0x, 10.0x front replacement lenses; 0.67x, 2.0x adapter tubes; autofocus LED grid projector; laser pointer (included with optional TTL laser)
FOV size (std optical configuration)	Measured diagonally, 5.4 mm (low mag) to 0.95 mm (high mag)	
Illumination	High-performance LED profile light (monochromatic), TTL surface light (white), low incidence oblique Vu-Light LED ring light (white)	Adjustable 32 mm diameter fiber optic ring light, in lieu of Vu-Light
Camera	High resolution, black & white digital metrology camera	
Image processing	256 level grayscale processing with 10:1 subpixel resolution	
Sensor options (contact OGP for possible combinations of sensors)		Touch probe and change rack, off-axis DRS <sup>™</sup> laser or TeleStar <sup>®</sup> Probe, on-axis TTL laser, off-axis Rainbow Probe <sup>™</sup> scanning white light sensor, Feather Probe <sup>™</sup> , SP25 scanning probe
Controller	Windows <sup>®</sup> based, with up-to-date processor and on board networking/communication ports	
Controller accessory package		24" flat panel LCD monitor, or dual 24" flat panel LCD monitors, keyboard, 3-button mouse (or user supplied)
Software	<b>QVI Portal, including:</b> <ul style="list-style-type: none"> <li>• Portal Navigator</li> <li>• Independent Calibration Engine (ICE)</li> <li>• Multimedia Content Viewer</li> <li>• SmartLink<sup>™</sup></li> </ul>	<b>Metrology software:</b> ZONE3 <sup>®</sup> or ZONE3 Pro, MeasureMind <sup>®</sup> 3D MultiSensor <b>Productivity software:</b> MeasureFit <sup>®</sup> Plus, SmartFit <sup>®</sup> 3D, SmartProfile <sup>®</sup> <b>Offline software:</b> ZONE3, MeasureMind 3D MultiSensor
Power requirements	110-120 vac or 200-240 vac, 50/60 Hz, 1 phase, 700 W	
Rated environment	Temperature 18-22° C, stable to ±1° C; 30-80% humidity; vibration <0.001g below 15 Hz	
Operating environment, safe operation	15-30° C	
XY area accuracy <sup>1</sup>	$E_2 = (1.25 + 6L/1000) \mu\text{m}^{2,3,4}$	
Z linear accuracy <sup>1</sup>	$E_1 = (2.5 + 5L/1000) \mu\text{m}^4$	$E_1 = (2.0 + 5L/1000) \mu\text{m}^4$ (with optional TTL laser) $E_1 = (1.4 + 5L/1000) \mu\text{m}^4$ (with optional DRS-300 or -500 laser, or TP20 or TP200 touch probe)

<sup>1</sup>Where L = measuring length in mm. Applies to thermally stable system in rated environment. Optical accuracy specifications at maximum optical magnification and 1:1 digital pixel resolution.

<sup>2</sup>With evenly distributed load up to 5 kg. Depending on load distribution, accuracy at maximum recommended load may be less than standard accuracy.

<sup>3</sup>Measured in the standard measuring plane. The standard measuring plane is defined as a plane that is within 25 mm of the worktable surface.

<sup>4</sup> $E_1$ , Z axis linear and  $E_2$ , XY area accuracy standards are described in QVI Publication Number 790762.



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