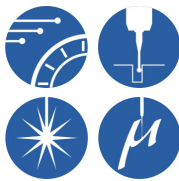




# SmartScope ZIP<sup>®</sup> 635

- *Accurate video metrology –* AccuCentric<sup>®</sup> motorized zoom lens auto-compensates with every magnification change
- *Built-in measurement stability –* A granite base and extruded aluminum bridge provide a rigid, orthogonal structure for measurement stability
- *High speed enhances productivity –* High acceleration and velocity in all three measurement axes
- *High reliability transport –* Rigid drive system contributes to long-term reliability
- *Multisensor versatility –* Optional non-contact sensors and touch probes

## High Speed Multisensor Measuring System for Large Parts



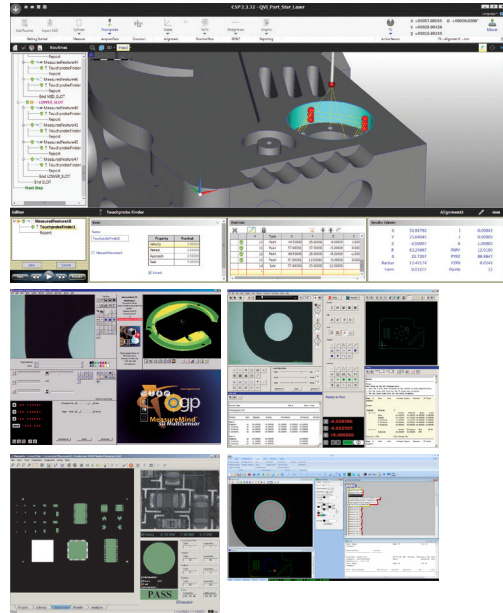
Axis	Travel (mm)
X axis	635
Y axis	635
Z axis	200
Extended Y (Opt)	850



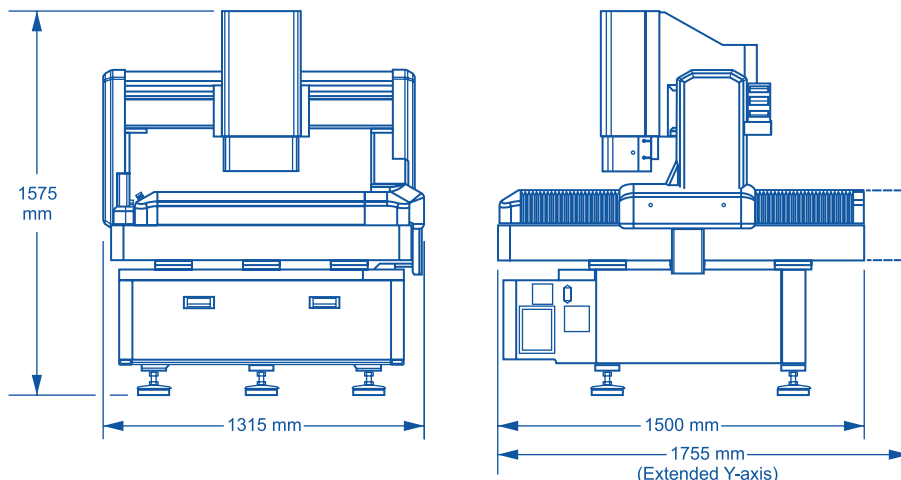
Shown with optional touch probe & change rack



# SmartScope ZIP® 635



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



Machine Weight: 1310 Kg

	Standard	Optional
<b>XYZ travel</b>	635 x 635 x 200 mm	635 x 850 x 200 mm
<b>XYZ scale resolution</b>	0.1 µm	
<b>Drive system</b>	DC servo with 4-axis control (X,Y,Z, zoom); with multifunction handheld controller	
<b>Transport velocity/acceleration</b>	Velocity: X,Y = 500 mm/sec, Z = 100 mm/sec; Acceleration: X,Y = 1000 mm/sec <sup>2</sup> , Z = 300 mm/sec <sup>2</sup>	
<b>Worktable</b>	Nickel plated steel, with fixture holes, removable stage glass, 50 kg recommended max payload	
<b>Optics</b>	AccuCentric® auto-compensating zoom, motorized; 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 SmartRing™ light), 2.5x, 5.0x, 10.0x front replacement lenses; autofocus LED grid projector; laser adapter (includes laser pointer)
<b>FOV size (std optical configuration)</b>	Measured diagonally, 5.0 mm (low mag) to 0.9 mm (high mag)	
<b>Illumination</b>	Substage LED profile (monochromatic), coaxial LED surface (white), SmartRing LED ring light (white)	VuLight™ LED oblique illuminator, small fiber optic ring light, fiber optic surface light, large fiber optic ring light
<b>Camera</b>	High resolution color metrology camera	High resolution black & white digital metrology camera
<b>Image processing</b>	256 level grayscale processing with 10:1 subpixel resolution	
<b>Sensor options (contact OGP for possible combinations of sensors)</b>		Touch probe and change rack, on-axis TTL laser, off-axis DRS™ laser, Rainbow Probe™ scanning white light sensor; Feather Probe™
<b>Controller</b>	Windows® based, with up-to-date processor and on board networking/communication ports	
<b>Controller accessory package</b>		24" flat panel LCD monitor, or dual 24" flat panel LCD monitors, keyboard, 3-button mouse (or user supplied)
<b>Software</b>	<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™</li> </ul>	<b>Metrology software:</b> ZONE3® or ZONE3 Pro, MeasureMind® 3D MultiSensor, Measure-X®, VMS™, Elements® <b>Productivity software:</b> MeasureFit® Plus, SmartFit® 3D, SmartProfile® <b>Offline software:</b> ZONE3, MeasureMind 3D MultiSensor, Measure-X, VMS
<b>Power requirements</b>	100-120 VAC or 200-240 VAC, 50/60 Hz, 1 phase, 1000 W	
<b>Rated environment</b>	Temperature 18-22° C, stable to ±1° C; 30-80% humidity; vibration <0.001g below 15 Hz	
<b>Operating environment, safe operation</b>	15-30° C	
<b>XY area accuracy<sup>1</sup></b>	$E_2 = (2.5 + 5L/1000) \mu\text{m}^{2.3}$	
<b>Z linear accuracy<sup>1</sup></b>	$E_1 = (2.0 + 5L/1000) \mu\text{m}^3$ (with 2.0x lens attachment)	$E_1 = (1.8 + 5L/1000) \mu\text{m}^3$ (with optional TTL laser, or DRS-2000 laser) $E_1 = (1.3 + 5L/1000) \mu\text{m}^3$ (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. Maximum rate of temperature change: 1° C/hour. Maximum vertical temperature gradient: 1° C/meter. All optical accuracy specifications at maximum zoom lens setting.

<sup>2</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>3</sup>E<sub>z</sub> Z axis linear and E<sub>2</sub> XY area accuracy standards are described in QVI Publication Number 790762.



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