

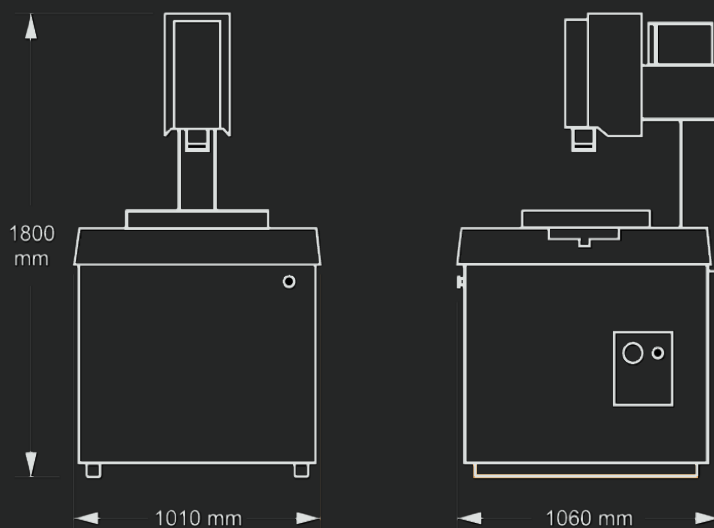
- **Accurate video metrology** – AccuCentric® motorized zoom lens automatically compensates magnification for each zoom position
- **Measurement stability is built-in** – A granite support structure ensures vibration isolation and measurement stability
- **Multisensor versatility** – Optional non-contact sensors and touch probes



High Accuracy  
Multisensor Metrology System

Axis	Travel (mm)
X axis	300
Y axis	300
Z axis	200
Extend. X (Opt)	300

Machine Weight: 750 Kg  
Crated Weight: 970 Kg



## Technical data SmartScope Zip 300

	Standard	Optional
<b>XYZ measuring range</b>	300 x 300 x 200 mm	Extended Z axis, 300 mm
<b>XYZ scale resolution</b>	0.1 µm	0.05 µm
<b>Drive system</b>	DC servo with 4-axis control (X,Y,Z, zoom); with multifunction handheld controller	
<b>Worktable</b>	Hardcoat anodized, with fixture holes, removable stage glass, 30 kg recommended max payload	
<b>Rotary axis</b>		Miniature Servo Rotary (MSR), MicroTheta Rotary (MTR), Heavy Duty Rotary (HDR), High Precision Rotary (HPR), Dual Rotary (requires optional 300 mm Z axis)
<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; 0.67x, 2.0x adapter tubes; 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™ oblique illuminator, small fiber optic ring light, fiber optic surface light, large fiber optic ring light
<b>Camera</b>	High resolution color digital 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, SP25 scanning probe, off-axis DRS™ laser, on-axis TTL 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>	<ul style="list-style-type: none"> <li>• Choice of ZONE3 Express or Measure-X or MeasureMind 3D metrology software</li> <li>• QVI Portal</li> <li>• Portal Navigator</li> <li>• Independent Calibration Engine (ICE)</li> <li>• Multimedia Content Viewer</li> <li>• SmartLink™</li> </ul>	<b>Metrology software:</b> ZONE3 Express, Prime, or Pro; MeasureMind 3D; Measure-X <b>Productivity software:</b> MeasureFit® Plus, SmartFit® 3D, SmartProfile® <b>Offline software:</b> ZONE3, MeasureMind 3D, Measure-X
<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</b>	$E_2 = (1.5 + 5L/1000) \mu\text{m}$ <sup>1,2,3,4</sup>	
<b>Z linear accuracy</b>	$E_1 = (2.5 + 5L/1000) \mu\text{m}^{1,4}$ (with 2.0x lens attachment)	$E_1 = (2.0 + 5L/1000) \mu\text{m}^{1,4}$ (with optional TTL laser, or DRS-2000 laser) $E_1 = (1.4 + 5L/1000) \mu\text{m}^{1,4}$ (with optional DRS-300 or -500 laser, or TP20 or TP200 touch probe)

1Where 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.

2With evenly distributed load up to 5 kg. Depending on load distribution, accuracy at maximum rated load may be less than standard accuracy.

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

4E1 Z axis linear and E2 XY area accuracy standards are described in QVI Publication Number 790762.