

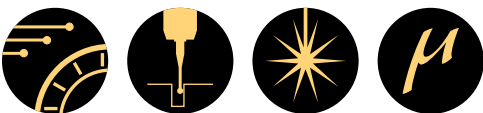
## Fast, Accurate Video and Multisensor Measurement

	Travel	mm	in
<b>ZIP 300</b>	X axis	300	12
	Y axis	300	12
	Z axis	200	8
<b>Extended Z (option)</b>	Z axis	300	12

SmartScope ZIP® 300 from OGP® is a proven performer, and continues to be the preferred video measurement system of manufacturers. Its video imaging is enhanced by all-LED illumination. As a multisensor machine, SmartScope ZIP 300 is available with contact and non-contact probes, including the unique switchable TTL laser.

- The innovative ergonomic handheld controller combines joystick stage control and other important operational controls so they are right at hand.
- DC servo motor drives deliver high speed performance, and the cast iron support structure ensures measurement stability and isolation.
- MeasureMind® 3D MultiSensor metrology software is designed to take full advantage of a 3D measurement environment and combines a user-friendly interface with full geometric functionality.
- Video measurement is effortless with fast field-of-view image processing with advanced edge detection algorithms designed for repeatability in real-world applications.
- SmartScope ZIP 300 is ready to supply the benefits of multisensor metrology with an assortment of available touch probes, lasers, and micro-probes to fully characterize parts automatically in a single setup.

Quality. Speed. Accuracy.  
Who Could Ask  
for More?



# Technical Specifications

■ Standard    ■ Optional

<ul style="list-style-type: none"> <li>■ <b>Stage travel (XYZ):</b> 300 x 300 x 200 mm (12 x 12 x 8")</li> <li>■ <b>Extended Z axis:</b> 300 mm (12")</li> <li>■ <b>Measuring unit dimensions (approx LWH):</b> 106 x 100 x 180 cm, 750 kg</li> <li>■ <b>Computer workstation dimensions (approx LWH):</b> 91 x 61 x 80 cm, 36 kg</li> <li>■ <b>XYZ scale resolution:</b> 0.1 μm</li> <li>■ <b>Motor drives:</b> DC servo</li> <li>■ <b>Interactive stage control:</b> 4 axis (X,Y,Z,zoom) with ergonomic, multi-function hand controller</li> <li>■ <b>Stage velocity:</b> Z axis min 100 mm/sec; X,Y axis 200 mm/sec</li> <li>■ <b>Worktable:</b> Hardened worktable with fixture holes, removable stage glass, and 30 kg load capacity</li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Zoom lens:</b> Patented<sup>†</sup> 7:1, AccuCentric<sup>®</sup> auto-calibrating, motorized, 10 position</li> <li>■ <b>Lens attachments:</b> 0.5x, 0.75x, 1.5x, 2.0x</li> <li>■ <b>Front replacement lenses:</b> 1.0x 2.0x, 2.5x, 5.0x, 10.0x</li> <li>■ <b>Adapter tubes:</b> 1.0x 0.67x, 2.0x</li> <li>■ <b>Illumination:</b> Substage LED backlight (collimated, green), white TTL LED surface illumination, and patented<sup>††</sup> SmartRing<sup>™</sup> white LED illuminator Vu-Light oblique illuminator, small fiber optic ring light, fiber optic surface light, large fiber optic ring light</li> <li>■ <b>Accessories:</b> Autofocus grid projector (LED)</li> <li>■ <b>Camera:</b> 1/2" format high resolution color CCD with 768 x 494 pixel array High resolution grayscale (in lieu of color camera)</li> <li>■ <b>Image processing:</b> 256 level grayscale processing with 10:1 sub-pixel resolution</li> <li>■ <b>Multisensor options:</b> Touch probe and change rack, DRS<sup>™</sup> laser, TTL laser, Rainbow Probe<sup>™</sup> scanning white light sensor, Feather Probe<sup>™</sup>, SP25 Scanning Probe, laser pointer (not available with TTL laser) (contact OGP for possible combinations of sensors)</li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Power requirements:</b> 115/230 vac, 50/60 Hz, 1 φ, 700 W</li> <li>■ <b>Rated environment:</b> Temperature between 18 and 22° C, stable to ± 1° C; 30-80% humidity (non-condensing); vibration &lt;0.001g below 15 Hz</li> <li>■ <b>Operating environment, safe operation:</b> 15-30° C</li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Computer:</b> Minimum configuration Dual Core processor @ 1.8 GHz, 1.0 GB RAM, 80 GB hard drive, 1.44 MB floppy drive, DVD-RW drive, parallel, serial, and USB 2.0 ports, on board 10/100 LAN</li> <li>■ <b>Operating system:</b> Microsoft<sup>®</sup> Windows<sup>™</sup> XP Professional</li> <li>■ <b>Computer accessory package:</b> 22" or 24" flat panel LCD monitor, or dual 22" flat panel LCD monitors, keyboard, three-button mouse (or user supplied)</li> <li>■ <b>Metrology software:</b> OGP MeasureMind<sup>®</sup> 3D MultiSensor OGP Measure-X<sup>®</sup> (in lieu of MeasureMind 3D)</li> <li>■ <b>Software:</b> For use with Measure-X or MeasureMind 3D; MeasureFit<sup>®</sup> Plus, SmartReport<sup>®</sup> powered by QC-Calc, SmartFeature<sup>®</sup>, QC-Calc<sup>™</sup>, TrueMap<sup>™</sup></li> <li>■ <b>Software:</b> For use with MeasureMind 3D only; SmartCAD<sup>®</sup> 3D, SmartFit<sup>®</sup> 3D, SmartProfile<sup>™</sup>, SmartScript<sup>™</sup>, I++ DME, SmartTree<sup>™</sup></li> </ul>
<p>Where L=measuring length in mm. Applies to thermally stable system in rated environment. All optical accuracy specifications at maximum zoom lens setting.</p> <ul style="list-style-type: none"> <li>■ <b>XY area accuracy:</b> <math>E_z = (1.5 + 5L/1000) \mu\text{m}^*</math></li> <li>■ <b>Z linear accuracy:</b> <math>E_z = (3.5 + 5L/1000) \mu\text{m}^{**}</math></li> <li>■ <b>Z linear accuracy:</b> <math>E_z = (2.5 + 5L/1000) \mu\text{m}^{**}</math> (with optional 2.0x replacement lens/grid projector)</li> <li>■ <b>Z linear accuracy:</b> <math>E_z = (2.0 + 5L/1000) \mu\text{m}^{**}</math> (with optional TTL laser, or DRS-2000 laser)</li> <li>■ <b>Z linear accuracy:</b> <math>E_z = (1.4 + 5L/1000) \mu\text{m}^{**}</math> (with optional DRS-300 or -500 laser, or TP-20 or -200 touch probe)</li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Warranty:</b> One year, on-site</li> <li>■ <b>Accessories:</b> Fixtures and calibration artifacts, service and support contracts, computer workstation, rotary indexers</li> </ul>

<sup>†</sup>Patent Number 5,389,774    <sup>††</sup>Patent Number 5,690,417

\*With evenly distributed 5 kg load in the standard measuring plane. Depending on load distribution, accuracy at maximum rated load may be less than standard accuracy. XY axis artifact: QVI 25 intersection grid reticle in the standard measuring plane. The standard measuring plane is defined as a plane that is 25 mm above the table.

\*\*Z axis artifact: QVI step gage or master gage blocks.



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