



SmartScope® Quest™ 250

SmartScope Quest 250 – An advanced-technology 3D multisensor measurement system. This benchtop system is specifically designed to measure smaller parts, or for situations where space is at a premium. The rigid structural design provides full access to the measurement volume for fixturing flexibility. Quest 250 offers:

- **Accurate video metrology** – TeleStar® telecentric 10:1 zoom optics for the highest level of optical performance.
- **Multisensor versatility** – Optional touch probe, off-axis DRS™ Laser or on-axis TeleStar Plus TTL interferometric laser, micro-probes, and SP25 continuous contact scanning probe.
- **State-of-the-art software** – Powerful ZONE3® metrology software, and other productivity and offline software applications, to suit your requirements.

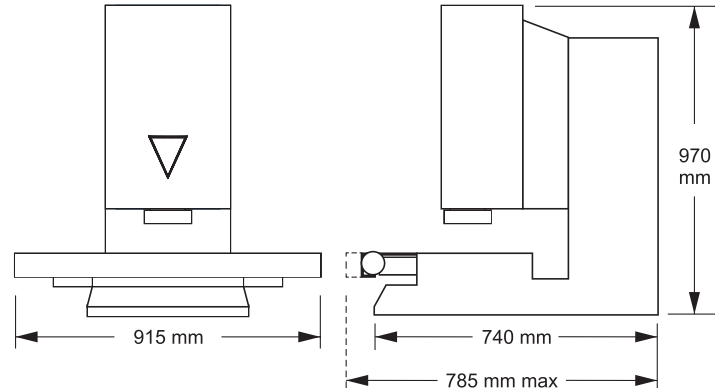
High Performance Dimensional Measuring System with a Compact Footprint



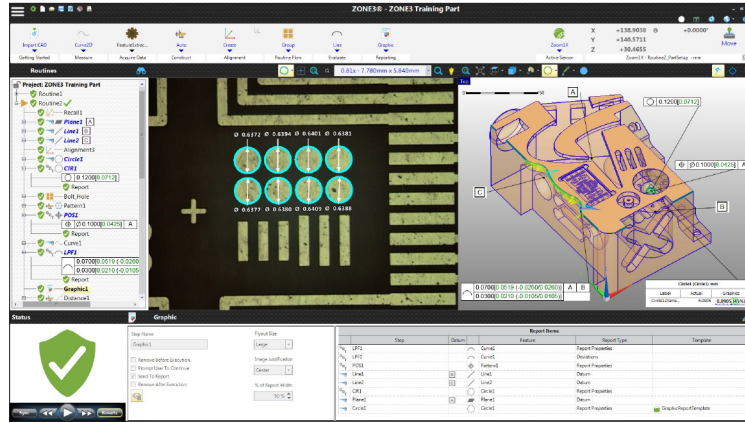
Shown with optional touch probe and change rack.



SmartScope® Quest™ 250



System Weight: 165 kg
Shipping Weight: 275 kg



ZONE3® Metrology Software represents a totally new way of working with multisensor measurement systems - robust programming capabilities provide faster, easier, and more productive measurements.

	Standard	Optional
XYZ Travel	300 x 150 x 200 mm	
XYZ Scale Resolution	0.1 µm	0.05 µm including dual X scales
Drive System	DC servo with 4-axis control (X, Y, Z, zoom); with multifunction handheld controller	
Worktable	Hardcoat anodized, with fixture holes, removable stage glass, 25 kg recommended max payload	
Rotary Axis		Miniature Servo Rotary (MSR), MicroTheta Rotary (MTR)
Optics*	AccuCentric® auto-compensating, fully telecentric zoom, motorized; 1x lens	Focus Grid Projector: LED source Laser Pointer: Not available with optional TTL laser Replacement / Laser Lenses: 0.5x, 2.0x, 4.0x
Illumination	Substage LED profile, coaxial LED surface, SmartRing™ LED ring light	Flexible SmartRing light for 0.5x lens
Metrology Camera	Monochrome digital metrology camera	
Field of View	8.1 mm x 6.1 mm (low zoom) to 0.81 mm x 0.61 mm (high zoom)	13.1 mm x 9.8 mm (0.5x lens), to 0.20 mm x 0.15 mm (4.0x lens)
Working Distance	68 mm	Up to 127 mm (0.5x lens)
Sensor Options		Tactile: TP20 or TP200 Touch Probe, SP25 Scanning Probe, Feather Probe™ Non-Contact: TeleStar Plus Interferometric TTL Laser, DRS™ Laser, Rainbow Probe™
Software	<ul style="list-style-type: none"> • ZONE3 Express metrology software • QVI® Portal 	Metrology software: ZONE3 Prime, ZONE3 Pro Productivity software: SmartFit® 3D, OGP® EVOLVE® Suite (Design, EVOLVE SPC, Manufacturing, SmartProfile®) Offline software: ZONE3
System Controller	Windows® based, with up-to-date processor and on board networking/communication ports	
Controller Options	24" flat panel LCD monitor, keyboard, 3-button mouse	Dual 24" flat panel LCD monitors
Power Requirements	100-120 VAC or 200-240 VAC, 50/60 Hz, 1 phase, 1250 W	
Safe Operating Environment	15-30 °C, non-condensing	
Rated Environment	Temperature 18-22 °C, stable to ± 1 °C; max rate of change 0.5 °C / hour; max vertical gradient of 1 °C / meter; 30-80% humidity; vibration <0.001g below 15 Hz	
XY Area Accuracy	$E_2 = (1.8 + 4L/1000) \mu\text{m}$	$E_2 = (1.0 + 6L/1000) \mu\text{m}$ (requires optional 0.05 µm scale resolution)
Z Linear Accuracy	$E_1 = (2.5 + 5L/1000) \mu\text{m}$	$E_1 = (1.5 + 5L/1000) \mu\text{m}$ (requires optional TeleStar Plus TTL Laser, DRS Laser, or Touch Probe)

Accuracy is evaluated with a QVI verification procedure where "L" is measured length in millimeters. Specifications apply within the rated environment. Standard optical specifications apply at the maximum optical magnification of the standard configuration. XY Accuracy applies with an evenly distributed load up to 5 kg in the standard measuring plane. The standard measuring plane is defined as a plane that is within 25 mm of the worktable surface. Depending on load distribution, accuracy at maximum payload may be less than standard.

*Lenses can be manually interchanged to change magnification and working distance.



Confidence. When Results Matter.™

World Headquarters: Rochester, NY, USA • 585.544.0400 • www.ogpnet.com

OGP Shanghai Co, Ltd: Shanghai, China

86.21.5045.8383/8989 • www.smartscope.com.cn

OGP Messtechnik GmbH: Hofheim-Wallau, Germany

49.6122.9968.0 • www.ogpmesstechnik.de

Optical Gaging (S) Pte Ltd: Singapore • 65.6741.8880 • www.smartscope.com.sg

© 2023 Quality Vision International Inc. Specifications subject to change without notice. All rights reserved. Trademarks are the properties of their respective owners.

Export of this product is controlled under U.S. Export Regulations. An Export License may be required for deliveries or re-export outside the United States. Part Number 790285-0423