SmartScope® Quest 250

- **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 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

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

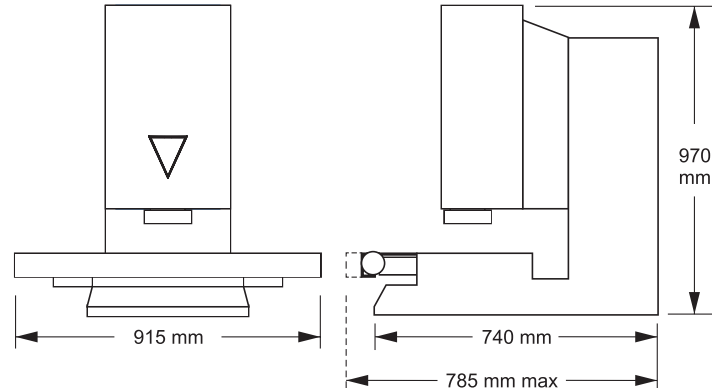## High Performance Dimensional Measuring System with a Compact Footprint

Shown with optional touch probe & change rack

SmartScope® Quest 250

ZONE3® Metrology Software represents a totally new way of working with multisensor measurement systems, providing faster, easier, and more productive measurements.

System Weight: 165 kg
Shipping Weight: 275 kg

	Standard	Optional
XYZ Travel	300 x 150 x 200 mm	
XYZ Scale Resolution	0.1 μm	0.05 μm, with 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*	10:1 AccuCentric® TeleStar® auto-compensating, telecentric zoom, motorized; mag range 0.8x-8x, with up to 10 calibrated positions; 1.0x replacement lens	**Focus Grid Projector:** LED source **Laser Pointer:** Not available with optional TTL laser **Replacement Lenses:** 0.5x, 2.0x, 4.0x **Laser Lenses:** 0.5x, 2.0x, 4.0x
FOV Range	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	65 mm	Up to 127 mm (0.5x lens)
Illumination	Patented† high-performance substage monochromatic profile, LED coaxial TTL surface, 8 sector / 6 ring SmartRing™ LED	
Camera	High resolution, black & white digital metrology camera	
Image Processing	256 level grayscale processing with 10:1 subpixel resolution	
Sensor Options		**Tactile:** TP20 or TP200 Touch Probe, SP25 Scanning Probe, Feather Probe™ **Non-Contact:** Patented†† on-axis TeleStar Plus Interferometric TTL laser, DRS™ Laser, Rainbow Probe™
Controller	Windows® based, with up-to-date processor and on board networking/communication ports	
Controller Accessory Package	24" flat panel LCD monitor, keyboard, 3-button mouse	24" flat panel LCD monitor for dual monitor display
Software	• ZONE3 Express metrology software • QVI Portal	**Metrology software:** ZONE3 Prime, ZONE3 Pro **Productivity software:** MeasureFit® Plus, SmartFit® 3D, SmartProfile®, EVOLVE SPC **Offline software:** ZONE3
Power Requirements	100-120 VAC or 200-240 VAC, 50/60 Hz, 1 phase, 700 W	
Operating Environment, Safe Operation	15-30 °C	
Rated Environment	Temperature 18-22 °C, stable to ±1 °C; max rate of change 1 °C / hour; max vertical gradient of 1 °C / meter; 30-80% humidity; vibration <0.001g below 15 Hz	
XY Area Accuracy	$E_2 = (1.8 + 4L/1000)$ μm	$E_2 = (1.0 + 6L/1000)$ μm (requires optional 0.05 μm scale resolution)
Z Linear Accuracy	$E_1 = (2.5 + 5L/1000)$ μm	$E_1 = (1.5 + 5L/1000)$ μm (requires optional TeleStar Plus TTL laser, DRS laser, or touch probe)

†Patent Number 6,488,398 ††Patent Number 7,791,731

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.™