

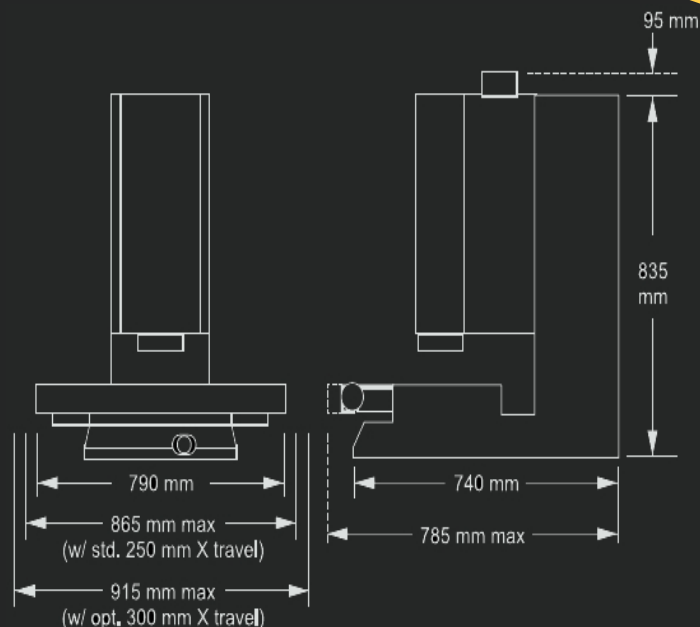
- **Accurate video metrology** – AccuCentric® motorized zoom lens automatically compensates magnification for each zoom position
- **Ready to work** – Heavy-duty cast base and integral compound stage with Y-axis center drive for stability
- **Multisensor versatility** – Optional touch probes, lasers, and micro-probes



Shown with optional touch probe & change rack

Axis	Travel (mm)
X axis	250
Y axis	150
Z axis	200
Extend. X (Opt)	300

Machine Weight: 120 Kg
Crated Weight: 280 Kg



Technical data SmartScope Zip 250

	Standard	Optional
XYZ travel	250 x 150 x 200 mm	Extended X axis, 300 mm
XYZ scale resolution	0.1 μm	0.05 μm
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	
Optics	Patented ₊ 10:1 AccuCentric [®] TeleStar [®] auto-calibrating, telecentric zoom, motorized; mag range 0.8x-8x, with up to 10 calibrated positions; 1.0x replacement lens	Replacement lenses, optical: 0.5x/130 mm WD, 2.0x/32 mm WD, 4.0x/20 mm WD Replacement lenses, optical/laser: 0.45x/200 mm WD, 0.5x/130 mm WD, 2.0x, 4.0x Optical accessories: LED grid projector, laser adapter (includes laser pointer)
FOV size (std optical configuration)	Measured diagonally, 8.9 mm (low mag) to 0.9 mm (high mag)	
Illumination	Patented ₊ servo-driven high performance substage backlight (monochromatic), LED coaxial TTL surface (monochromatic), 8 sector/6 ring SmartRing [™] LED (monochromatic)	Large fiber optic ring light (white), small fiber optic ring light (white), 8 sector/6 ring SmartRing [™] LED (white)
Camera	High resolution, black & white digital metrology camera	High resolution color metrology camera
Image processing	256 level grayscale processing with 10:1 subpixel resolution	
Sensor options (contact OGP for possible combinations of sensors)		Touch probe and change rack, SP25 scanning probe, patented ₊₊₊ on-axis TeleStar Plus interferometric TTL laser, off-axis DRS [™] laser, Feather Probe [™] , Rainbow Probe [™] scanning white light sensor, PH10 motorized probe head
Controller	Windows [®] based, with up-to-date processor and networking/communication ports	
Controller accessory package		24" flat panel LCD monitor, or dual 24" flat panel LCD monitors, keyboard, 3-button mouse (or user supplied)
Software	QVI Portal, including: <ul style="list-style-type: none"> • Portal Navigator • Independent Calibration Engine (ICE) • Multimedia Content Viewer • SmartLink[™] 	Metrology software: ZONE3 [®] or ZONE3 Pro, MeasureMind [®] 3D MultiSensor Productivity software: MeasureFit [®] Plus, SmartFit [®] 3D, SmartProfile [®] Offline software: ZONE3, MeasureMind 3D MultiSensor
Power requirements	115/230 vac, 50/60 Hz, 1 phase, 1380 W	
Rated environment	Temperature 18-22° C, stable to $\pm 1^\circ$ C; 30-80% humidity; vibration <0.001g below 15 Hz	
Operating environment, safe operation	15-30° C	
XYZ volumetric accuracy₁	$E_3 = (2.8 + 5L/1000) \mu\text{m}^{2,4,5}$	$E_3 = (2.5 + 6L/1000) \mu\text{m}^{2,4,5}$
XY area accuracy₁	$E_2 = (2.0 + 5L/1000) \mu\text{m}^{2,3,4}$	$E_2 = (1.8 + 6L/1000) \mu\text{m}^{2,3,4}$ (with optional 0.05 μm scale resolution)
Z linear accuracy₁	$E_1 = (2.5 + 5L/1000) \mu\text{m}^4$	$E_1 = (1.5 + 5L/1000) \mu\text{m}^4$ (with optional 2.0x replacement lens and grid projector; on-axis TeleStar Plus TTL laser; off-axis DRS-300 or -500 laser, or TP20 or TP200 touch probe)

1 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.

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

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

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