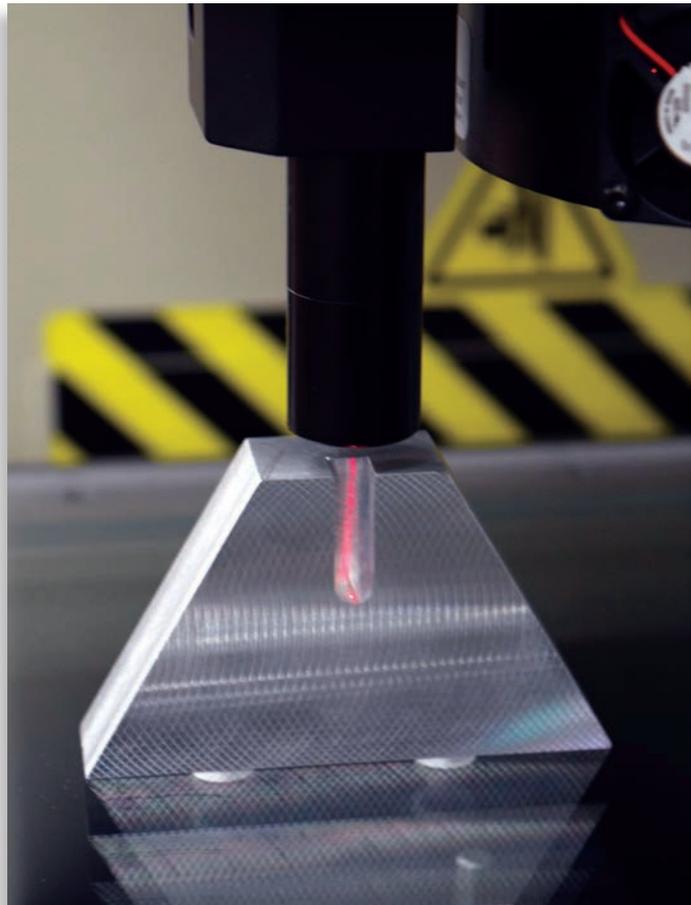


TeleStar<sup>®</sup> Probe

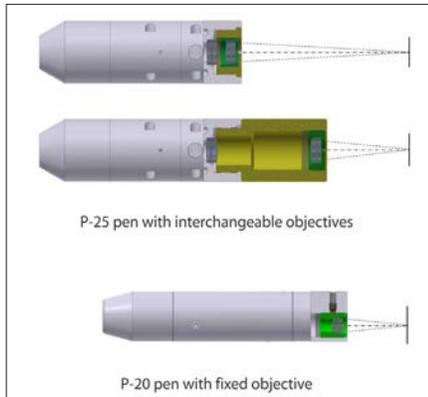
**TeleStar Probe** is a self-contained, off-axis, interferometric range sensor for surface contour measurement. TeleStar Probe offers sub-micron resolution, while scanning either specular or diffuse surfaces. Spot size as small as 5  $\mu\text{m}$  for measuring miniature features. The TeleStar Probe offers:

- **Speed, Accuracy and Long Working Distance** – Speeds up to 500 points/second with very high accuracy, internal reference, and up to 70 mm constant working clearance.
- **Auto Deployment** – Automatic deployment mechanism retracts when not in use on SmartScope ZIP<sup>®</sup> systems.
- **Interchangeable Lenses** – P-25 probe offers interchangeable objective lenses for different applications.

## Off-Axis High Resolution Interferometric Range Sensor



TeleStar P-20 Probe



TeleStar Probe



P-25-70 integrated on a SmartScope ZIP with fixed mount



P-20 integrated on FlexPoint® VersaFlex™ Multisensor Array

## Technical Specifications

Available for	Any SmartScope ZIP, Fusion®, or FlexPoint with a VersaFlex multisensor array		
Required Metrology Software	ZONE3®		
Probe Technology	Partial coherence interferometer		
Laser Class (internal laser pointer)	Class 2		
Deployment Mechanism (SmartScope ZIP Systems)	Mechanical, 38 mm deployment range		
Probes	<b>P-20</b>	<b>P-25-35</b>	<b>P-25-70</b>
Working Distance	25 mm	35 mm	70 mm
Measuring Range <sup>1</sup>	800 µm	800 µm	1400 µm
Spot Size <sup>2</sup> (nominal-FWHM)	5.8 µm	5.0 µm	9.2 µm
Acceptance Angle	> 75° from diffuse surface calibration sphere		
Resolution <sup>3</sup>	0.1 µm		
Accuracy <sup>4</sup>	1.0 µm		
Repeatability <sup>4</sup>	0.1 µm (1σ)		

<sup>1</sup>Measuring Range is the Z-range over which the performance of the sensor is linear and calibrated.

<sup>2</sup>With spot size at best focus. Spot sizes for this particular laser are the full width of the spot at half maximum value (FWHM).

<sup>3</sup>Using high quality specular (polished glass) surface, 1σ.

<sup>4</sup>Accuracy/Repeatability of the laser on horizontal specular surfaces within the measuring range. System performance varies with machine type.



### Safety Considerations

This system is classified as a Class II laser device by IEC 825 (2001). **Do not stare directly into the laser source.**