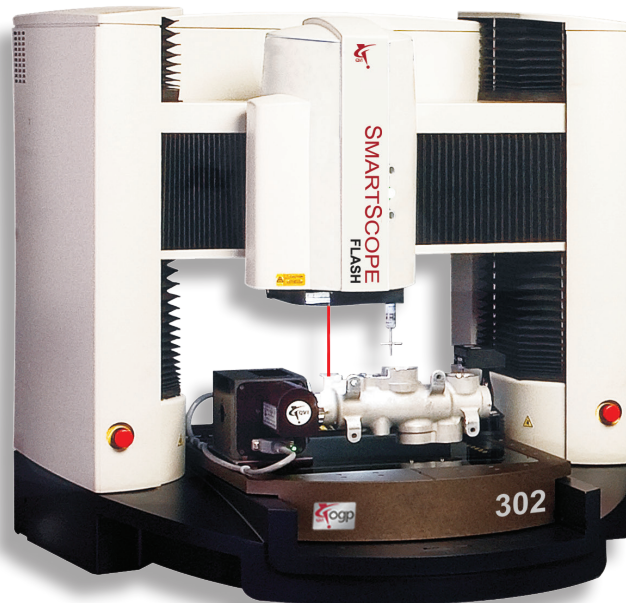


SmartScope® TTL Laser

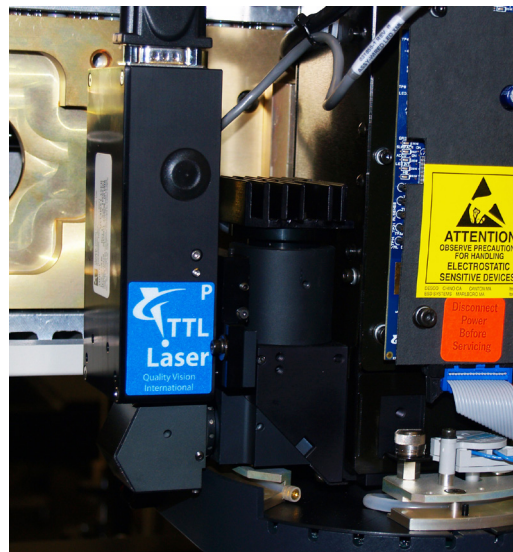
QVI® Through-the-Lens Lasers offer a non-contact method for measuring surfaces, using point focus for single-point measurements or scanning for multi-point measurements. QVI TTL lasers are compatible with all SmartScope® Flash™ and ZIP measuring systems.

- **TTL convenience –**  
The TTL laser is coaxial with system optics, allowing use for measurement or as a laser pointer
- **Use with other sensors –**  
Switch instantaneously between video and laser measurements
- **Long working distance –**  
Scan surfaces without risk of striking a part or fixture
- **Auto tracking –**  
The laser dynamically adjusts the Z-axis to track part contours automatically
- **Laser lens included –**  
A 2.0x laser lens that enhances laser and video performance is included

## Through-the-Lens Laser for Point Focus and Surface Scanning



# SmartScope® TTL Laser



## Technical Specifications<sup>1</sup>

<b>Available for</b>	Any OGP® SmartScope® Flash™ or ZIP dimensional measurement system	
<b>Required metrology software</b>	QVI® ZONE3®, MeasureMind® 3D MultiSensor, or Measure-X®	
	<b>Standard (with 2.0x Laser Lens)</b>	<b>Optional (with 5.0x Laser Lens)</b>
<b>Working distance</b>	38 mm	19 mm
<b>Measuring range<sup>2</sup></b>	500 µm	80 µm
<b>Capture range<sup>3</sup></b>	±3 mm	±400 µm
<b>Triangulation angle</b>	14°	35°
<b>Spot size<sup>4</sup> (nominal-FWHM)</b>	8x6 µm	3x1.2 µm
<b>Resolution<sup>5</sup></b>	0.4 µm	0.2 µm

### Footnotes and Definitions

<sup>1</sup>Specifications are nominal for TTL lasers installed on QVI systems when used in the specified operating environment.

<sup>2</sup>Measuring Range tracks within system's Z-axis travel range.

<sup>3</sup>Capture Range is surface dependent.

<sup>4</sup>Spot size at best focus.

<sup>5</sup>Using high quality specular surface, 1σ.

**Measuring Range** - The Z-range over which the performance of the sensor is linear and calibrated. The measuring range lies within the capture range.

**Capture Range** - The Z-range over which there is no uncertainty about which direction the surface lies, but a portion of which may be non-linear and uncalibrated. If the surface is within the capture range, the measuring system will drive the sensor until it is within its measuring range.



### Safety Considerations

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



Phone: (585) 544-0400 • (800) 647-4243

Fax: (585) 544-8092

info@ogpnet.com

www.qvii.com/ogp