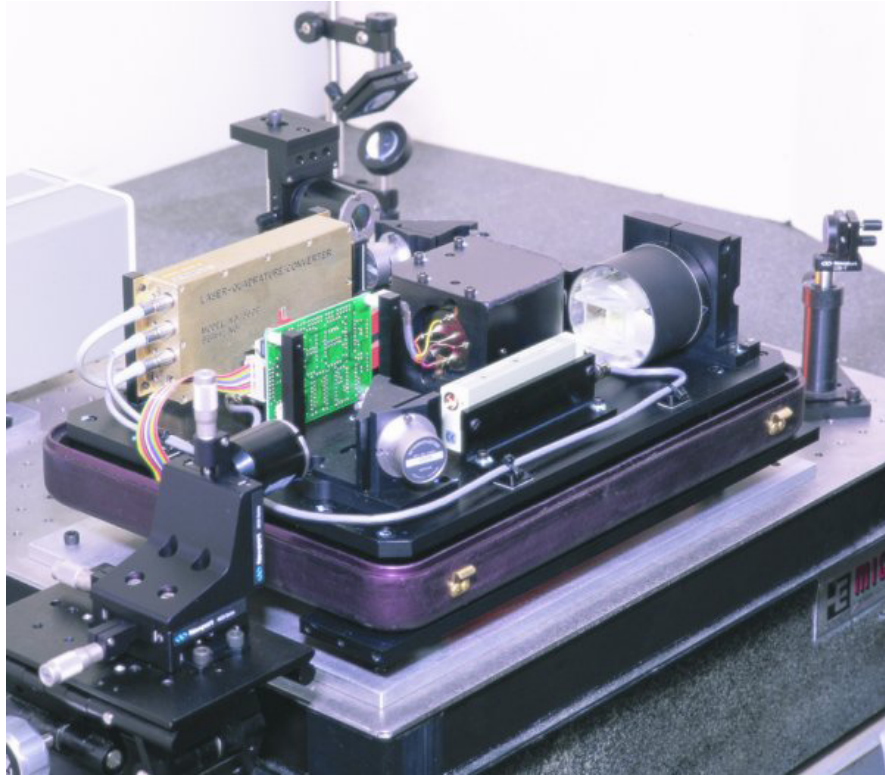


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**NSI-OP-5906**
**XY Optics Assembly**

**DESCRIPTION**

The NSI-OP-5906A XY Optics Assembly provides an accurate position and straightness measuring system for your planar near-field scanner. The XY Optics Assembly combines a two-axis laser interferometer with a patented laser beam monitor to achieve a highly accurate computer controlled scanner position feedback and alignment monitoring system. With the XY Optics Assembly installed on your scanner, probe position can be controlled to within 0.001", while moving along an essentially straight line. Cross-axis correction software insures that your probe deviates by no more than 0.002" from a straight line. (NSI has received U.S. patent number 5,408,318 for the laser beam monitor straightness feature.)

**CAPABILITIES**

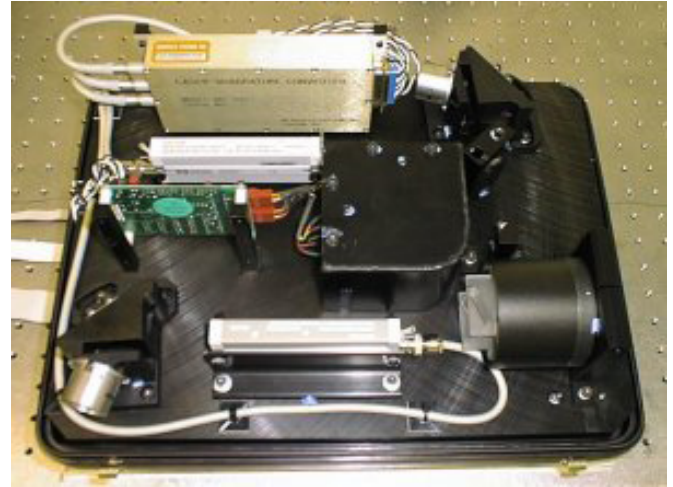
NSI-OP-5906A XY Optics Assembly is mounted on the X-carriage of the scanner. A schematic of the XY optics assembly is shown below. All of the hardware on the NSI-OP-5906A is protected by a cover used to minimize stray light contamination. The XY optics assembly is factory aligned and calibrated so there are no adjustments or controls required.

**FEATURES**

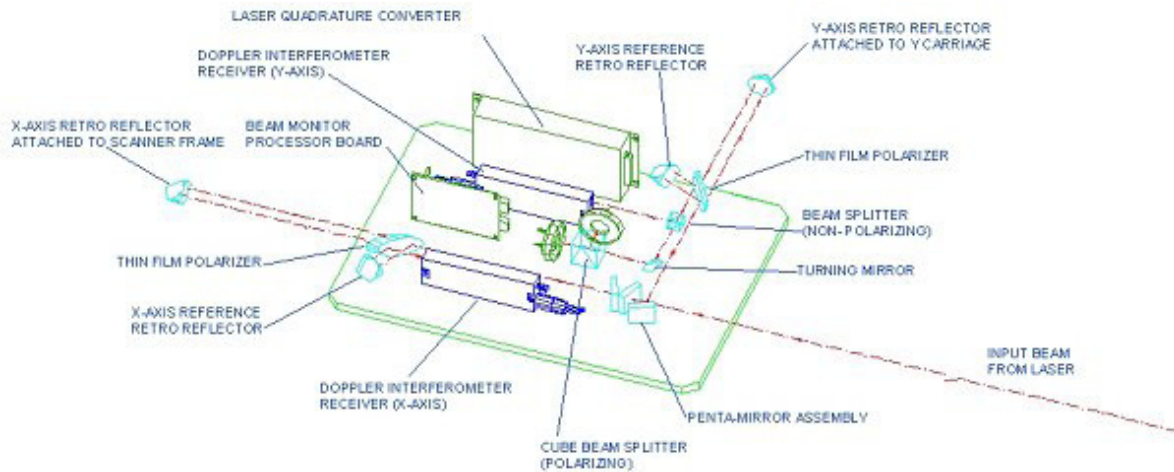
- Contains all active XY optics except Agilent laser source
- Pre-aligned and calibrated by NSI on granite surface table
- Measures probe X and Y positions and scanner X and Y straightness
- Requires DSP interface unit and software (included with NSI-OP-5928 and NSI-OP-5929 Measurement Systems)
- Patented NSI design (US Patent # 5,408,318)

SPECIFICATIONS	
X-position accuracy	0.001" (0.025mm)
Y-position accuracy	0.001" (0.0025mm)
X-axis straightness accuracy	3' x 3' (0.9 m x 0.9 m)
Y-axis straightness accuracy	<0.003" (0.076 mm) RMS
XY-axis laser beam orthogonality	0.002" (0.05 mm)
Maximum axis velocity	0.002" (0.05 mm) RMS
Maximum optical range	15 inches/sec. (0.38 m/s)

## NSI-OP-5906A XY Optics Assembly



## NSI-OP-5906A XY Optics Assembly Schematic



## DIMENSIONS

- ◆ Width - 20.00" (508mm)
- ◆ Depth - 8.61" (219mm)
- ◆ Height - 14.95" (380mm)

## ORDERING INFORMATION

Please contact the NSI Sales department to order this product.

### Nearfield Systems, Incorporated

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