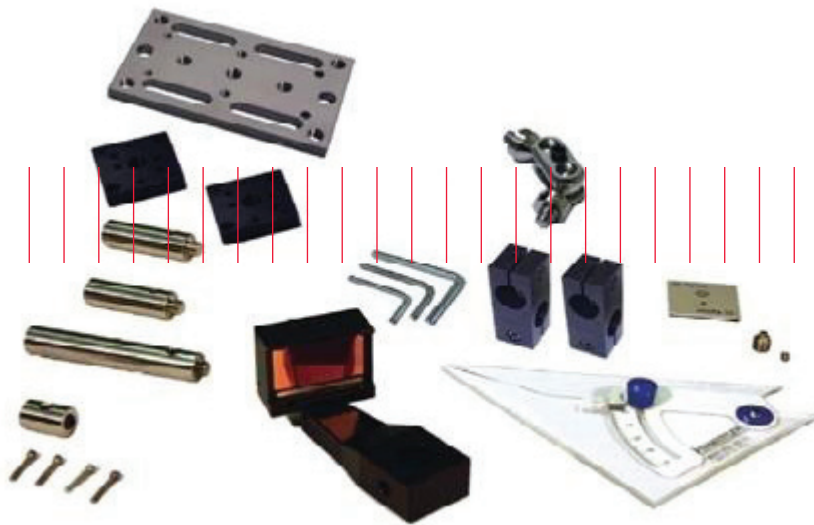


# Keysight Technologies

## 10768A Diagonal Measurement Kit

Data Sheet



## Measurement Range

- Up to 40 m (130 ft) with linear optics
- Up to 80 m (260 ft) with long range option

## Diagonal Measurement Accuracy

Temperature Range, °C [°F]	E1738A Air Sensor	In Vacuum †
0 – 40° [32° – 104°]	±0.4 ppm	±0.1 (±0.02) ppm

† Vacuum accuracy is ±0.02 ppm if the laser head is calibrated to MIL-STD-45662A.

## Diagonal Measurement Performance

Optics	Resolution
Linear optics (10766A)	1 nm (0.04 µin)
Plane mirror optics (10706A/B) *	0.5 nm (0.02 µin)
High resolution plane mirror optics (10716A) *‡	0.25 nm (0.01 µin)

\* Requires the 10724A Plane Mirror Reflector. Since alignment of these optics is much more sensitive than for linear optics, linear optics are recommended for general use.

‡ Aperture distance of 10716A is 12.7 mm, whereas 5519A is 11 mm.

## Components included in the 10768A Diagonal Measurement Kit

Description	Quantity
Post (medium ~50 mm)	2
Post (long ~100 mm)	1
Post (stub ~25 mm)	1
Hex key (5 mm)	1
Hex key (4 mm)	1
Hex key (2.5 mm)	1
Right-angle clamp	2
Beam-steering assembly	1
Adapter plate	2
Base (large)	1
Flexible ball-joint assembly	1
Alignment target	1
Lens tissue	1 pkg
Adjustable triangle	1
Setscrew (brass tip, M10 x 1.5 mm)	1
Setscrew (brass tip, M5 x 0.8 mm)	1
Cap screw (socket-head, M3 x 0.5 25 mm long)	4
Setscrew (M10 x 1.5 x 20 mm )	1
Flathead screw (M3 x 0.5 x 16 mm long)	4

## Related Literature

Publication Title	Publication No.
Keysight 5530 Laser Calibration System Brochure	5989-9354EN
Keysight 5530 Laser Calibration System Data Sheet	5989-9712EN
Keysight 5530 Laser Calibration System Flyer	5989-9707EN
Optics and Laser Heads for Laser-Interferometer Positioning Systems	5964-6190E
Keysight E1738A Air Temperature/Pressure/Humidity Sensor Data Sheet	5989-8456EN
Keysight 5530 Laser Calibration System Measurement Reference Guide	10747- 90077

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