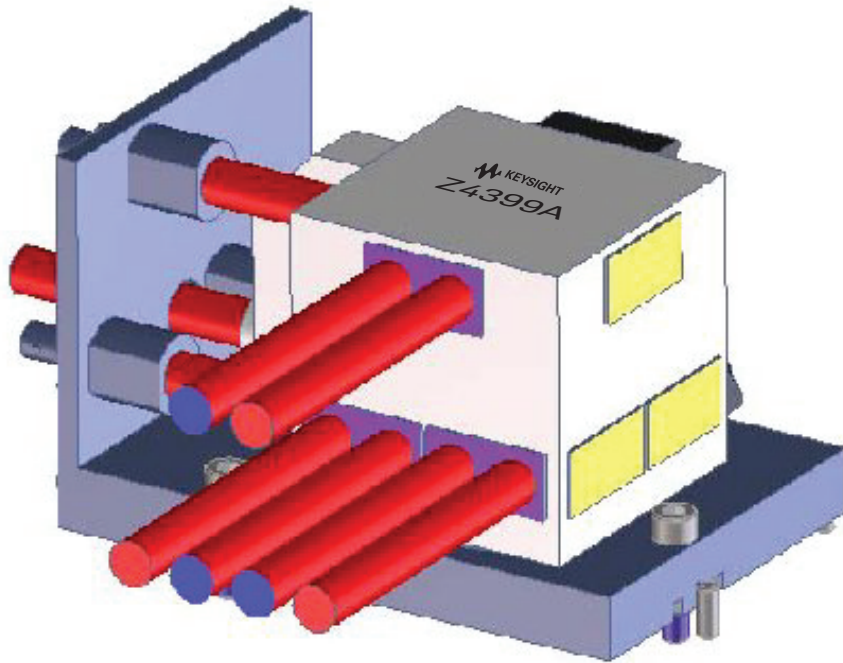


Keysight Z4399A Three-Axis Plane Mirror Interferometer

The Keysight Technologies, Inc. Z4399A three-axis plane mirror interferometer features pre-aligned optical sensors, excellent beam parallelism, low non-linearity error and low thermal drift. Machined datums aid in positioning the unit and reduce alignment effort.



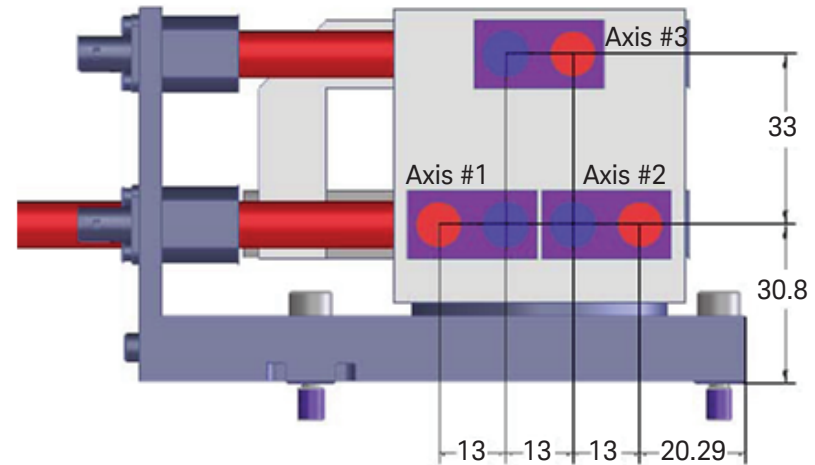
Key features

Accommodates 9 mm and smaller input beam.

- Beam parallelism < 25 μ radians
- High output efficiency, 18% typical
- High (~700 Hz) mechanical resonance frequency
- $\lambda/4$ optical resolution
- Less than 10 nm/ $^{\circ}$ C thermal drift

Key specifications

Options	Description
Weight	1.66 kg (3.65 lbs)
Dimensions (L x W x H)	129 mm x 79.5 mm x 72.8 mm
Materials	Baseplate: Invar Optics: BK-7
Natural frequency	~ 700 Hz
Mounting interface	Fasteners: M5 x 0.8 captive SHCS Surface profile: 0.02 mm Surface finish: 0.4 μm
Beam diameter	9 mm maximum visible
Resolution	Optical: $\lambda/4$ Linear: 0.15 nm using 1024x resolution extension
Thermal drift due to glass path length imbalance	< 10 nm/ $^{\circ}\text{C}$
Non-linearity error	± 1 nm
Output efficiency	Typical for all axes: 18% Worst case for all axes: 12%
Measure point tolerance	± 0.5 mm relative to nominal location
Input beam cone angle	< 1 mrad
Beam parallelism	Axis #1 to Axis #2: < 25 μrad Axis #1 to Axis #3: < 25 μrad
Operating temperature	19 $^{\circ}\text{C}$ to 26 $^{\circ}\text{C}$
Measurement mirror recommendation	Reflectivity: > 92% Flatness: $\lambda/20$



Z4399A beam position in mm and axis numbering.

For more details on Keysight interferometry systems, components and ordering information please visit www.keysight.com/find/lasers

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