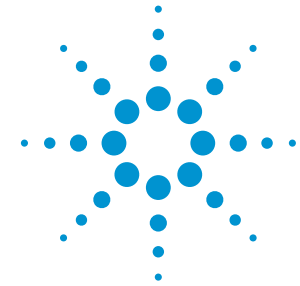


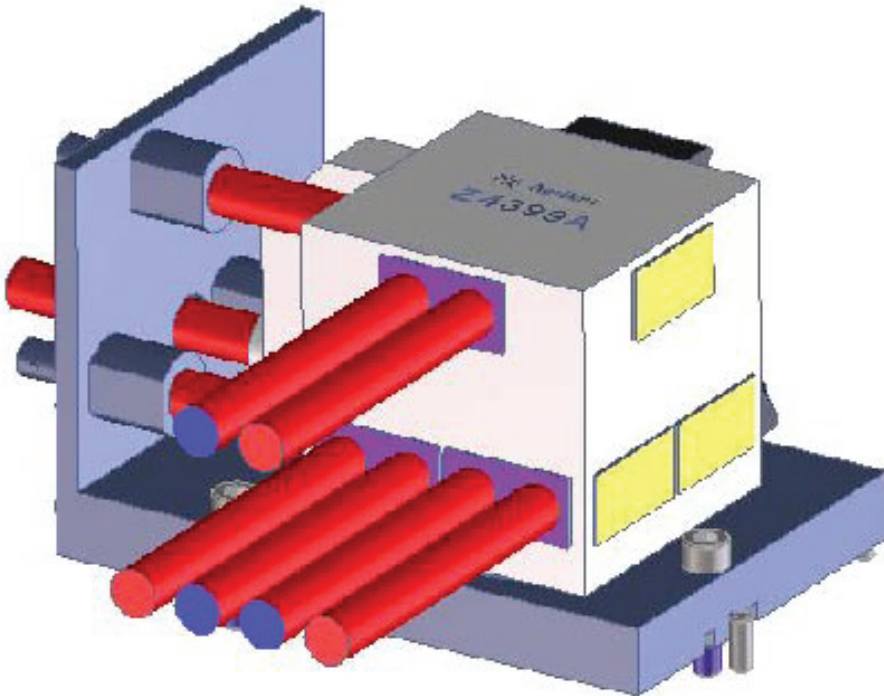
Agilent Z4399A Three-Axis Plane Mirror Interferometer

The Agilent 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/°C thermal drift.



Z4399A Three-Axis Plane Mirror Interferometer showing one face positioned against one of the 3 customer supplied datum pins.

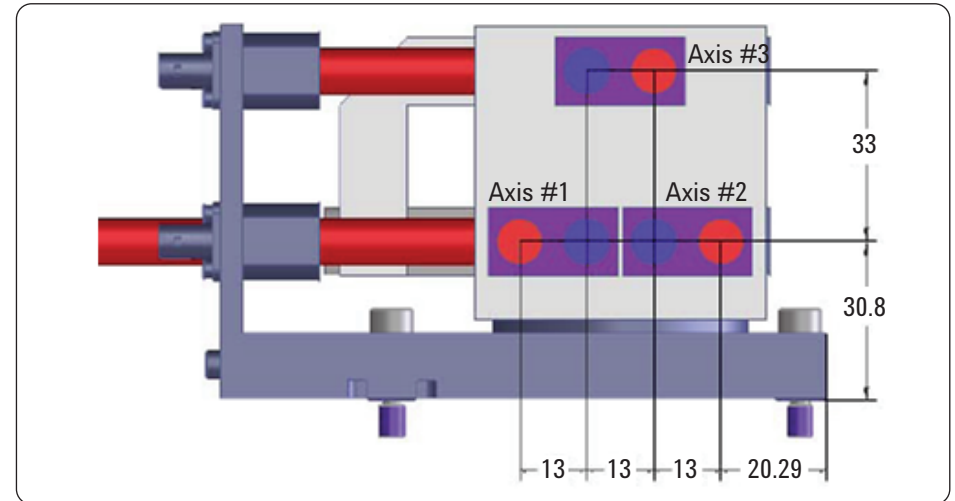


Quick Fact Sheet

Agilent Z4399A Three-Axis Plane Mirror Interferometer

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/°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 °C to 26 °C
Measurement mirror recommendation	• Reflectivity: > 92% • Flatness: $\lambda/20$



Z4399A beam position in mm and axis numbering.

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

