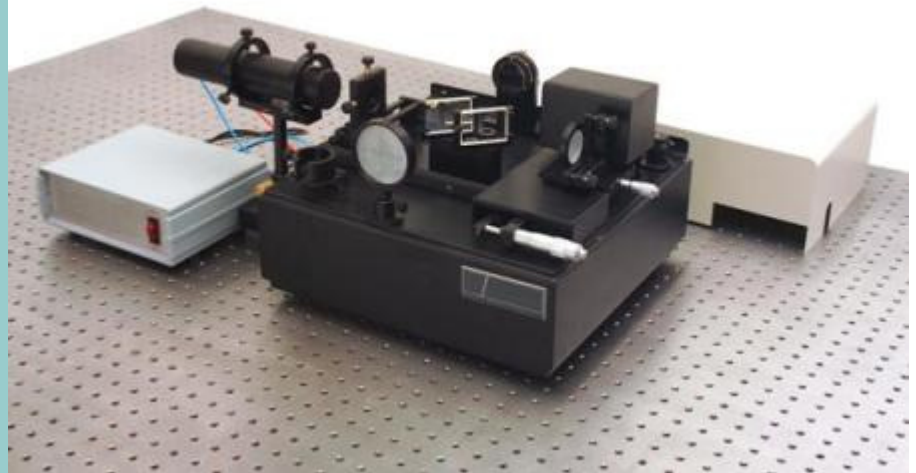


LEOI-21 Universal Interferometer of Michelson and Fabry-Perot



- *Michelson Interferometer*
- *Fabry-Perot Interferometer*
- *Rigid, compact and precise*
- *Easy operation*
- *Large optics*
- *Comprehensive documentation*
- *Cost effective*

This equipment combines the historically important Michelson interferometer and the high resolution Fabry-Perot interferometer in one rigid and compact structure.

Michelson interferometer is still an important instrument in today's physics laboratories and is used for observing the interference phenomena. Fabry-Perot interferometer is for observing multiple-beam interference and measuring the fine structure of spectrum.

Measurements are precise in two modes of operation. Switching between the two modes of operation and aligning components is relatively simple.

This instrument is suitable for physics teaching in universities and colleges.



Experiment Examples

Michelson Interferometer

- Interference fringes
- Equal inclination interference
- Equal thickness interference
- White light fringes
- Refractive index of air versus pressure

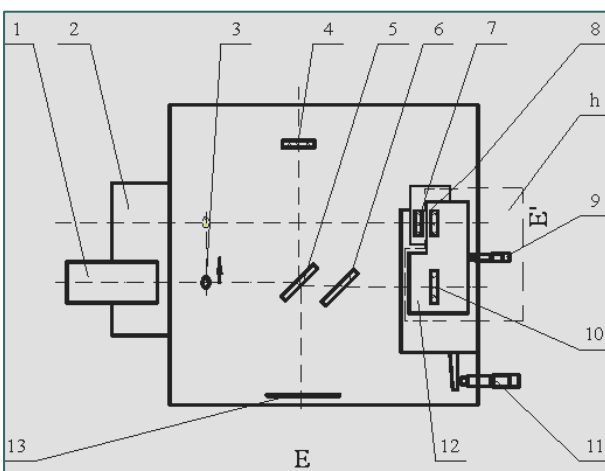
Fabry-Perot Interferometer

- Multiple beam Interference
- Sodium D-lines separation and measurement

Specifications

Flatness of Beam Splitter and Compensator	0.05 λ
Travel of Movable Mirror	1.25mm (travel of fine micrometer: 25mm) 10mm for presetting (coarse micrometer)
Minimum Travel Reading	0.0005mm
Sodium-Tungsten Lamp	Sodium/10W and Tungsten/15W
He-Ne Laser	0.7-1mW@632.8nm
Wavelength Measurement Accuracy	Relative error of 2% for counting 100 fringes
Air Chamber with Gauge	Chamber length of 80mm, gauge: 0 ~ 40Kpa
Overall Dimensions	350x350x245mm
Weight of Main Frame	Approx. 17kg

Schematic



1. He-Ne laser	2. Side stage
3. Beam expander	4. Fixed mirror
5. Beam splitter	6. Compensator
7. F-P fixed mirror	8. F-P movable mirror
9. Coarse micrometer	10. Movable mirror
11. Fine micrometer	12. Movable mirror stage
13. Ground glass screen	