

Beam Splitter

Type : Cubic
Size (mm) : 15 x 15 x 15
R%/T% : 50 / 50
Flatness : $\lambda/4$ (at 632nm)

Mirror

Type : Circular
Diameter (mm) : 25 (5 mm thick)
Second Mirror : Fixed on Beam Splitter

LASER

Type : Diode LASER (Battery operated)
Wavelength : 630nm

Optional

A) He-Ne LASER (630nm) with Power Supply 2mW

Note: He-Ne LASER is recommended for performing experiments.

55968 Michelson interferometer is a unique setup for the demonstration of interferometry. Michelson interferometer was used in famous Michelson-Morley experiment to show the constancy of speed of light and evidence of special relativity. The interference pattern is observed by splitting a beam of light into two paths, bouncing the beams back by mirrors and recombining them. The different paths may be of different lengths or composed of different materials to create alternating interference fringes. 55968 has compact design and is very easy to operate. The setup can be used with different types of sources like He-Ne LASER, Diode LASER.

Features

1. Patented Design
2. High quality optics
3. Machined parts with highly stable base
4. Precision micrometer with one micron least count
5. Precision mechanical design for mirror alignment and movement
6. Fringes can be obtained with different types of light sources (He-Ne LASER, Diode LASER)

Object

1. Study of understand Two Beam Interferometry using Michelson Interferometer
2. Study of generate circular fringe pattern
3. Study of calculate the wavelength of the given light source

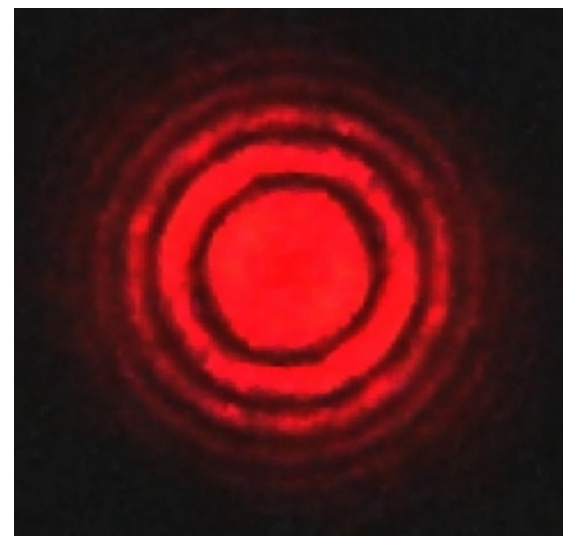
Technical Specifications

Base : Machined MS base of 6kg with rubber sheet attached at bottom to reduce vibration

Micrometer

Least count : 0.001 mm
Range : 0-25 mm

Note: Specifications are subject to change.



LASER Fringes

