



# Michelson Interferometer

## Nvis 6115



**Nvis 6115 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. Nvis 6115 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

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



# Michelson Interferometer

## Nvis 6115

### Scope of Learning

- Study of understand Two Beam Interferometry using Michelson Interferometer
- Study of generate circular fringe pattern
- 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

#### 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

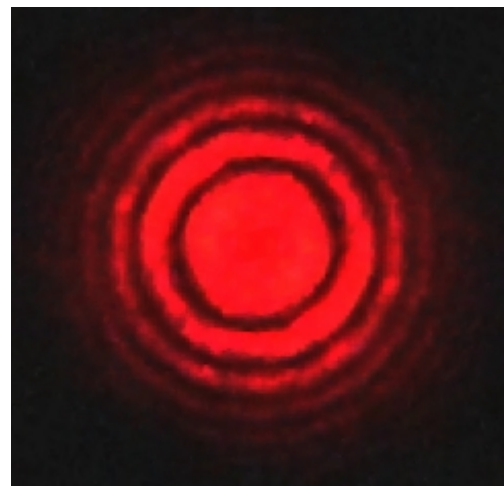
Type : Diode LASER (Battery operated)

Wavelength : 630nm

#### Optional

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

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



LASER Fringes

