



55965 Measurement of Wavelength of LASER is an Optical Setup to Understand the working of Diffraction Grating and Single Slit. It determines the wavelength of LASER Light. Here the LASER is used as a Monochromatic light source and a Diffraction grating/Single Slit for getting a diffraction pattern.

Interference and Diffraction are the two main phenomenon which demonstrates the wave nature of light. Diffraction grating allows a beam of light to resolve into different colours. It usually consists of thousands of narrow, closely spaced parallel slits. With the help of this setup we can find the wavelength of any intense Monochromatic light.

Features

1. A comprehensive and self contained Optics System
2. A complete system with Light Source, Bench and all necessary accessories
3. Compact single rail design
4. Sliding stand for precise arrangement

Object

1. Determination of Wavelength of LASER using Diffraction Grating
2. Determination of Wavelength of LASER using Single Slit

Single Slit
Slit width : 0.05 mm
Dimensions (mm) : 60 x 45

Technical Specifications

Optics Bench

Dimensions (mm) : L 1000 x W 50 x H 50
Fixed Stand : 2 Nos.
Sliding Stand : 1 No.

LASER Source

Wavelength : 630nm
Output : Less than 3mW
Battery : 1.5V (2 Nos.)
Diffraction Grating : 300L / mm or
600L / mm or 15000L /
inch

Scale

Horizontal : 10-0-10 cm
Vertical : 9-0-9 cm

Optional

Helium Neon LASER

Input supply : 230V +/-10%, 50Hz
Output power : 2mW
Wavelength : 632.8nm
Beam diameter : 0.5 mm
Beam divergence : 1.7 mrad
Supplied with round stand for mounting

Note: Specifications are subject to change.