



**55921** Optics Bench is a versatile system designed to provide a comprehensive introduction to laboratory optics. It clarifies all the basic concepts of light and optics. Setup includes an optics bench Concave, convex lenses and mirrors of different focal length. This Optics Bench provides the basic knowledge about properties of light such as Refraction, Reflection, Dispersion and Total internal reflection. Experiments such as determination of focal length of concave, convex lenses and mirrors can also be performed.

#### Features

1. Ideal System for performing many Experiments
2. A comprehensive and self contained optics system
3. A complete system with a light source, Bench and all other accessories
4. Fixed and Sliding stands provided
5. Accessories are provided in a good quality carrying case

#### Object

01. Study of the image formation of source
02. Study of Introduction of ray optics by ray tracing
03. Study of Verification of Reflection of light
04. Study of determine Refractive index of semi circle (D-shape) lens by Snell's law
05. Study of Verification of Reversibility of light
06. Study of determine critical angle and obtain Total Internal Reflection
07. Study of Dispersion of light
08. Study of Convergent and Divergent lens by image and object relationships

09. Study of measure Focal Length of Convex lens using Basic Lens Equation
10. Study of measure magnification of image of Convex lens
11. Study of determine Focal length of Concave mirror by two Pin method
12. Study of determine Focal length of Convex lens by two Pin method

#### Technical Specifications

Optics Bench Length : 1 m  
Light Source : 150 W Incandescent light source

#### Converging and Diverging lens

Focal length : 00mm, 150mm each  
Diameter : 50mm each

#### Concave and Convex mirror

Focal length : 100mm, 150mm each  
Diameter : 50mm each

#### Plane Mirror

Dimensions (mm) : W 100 x D 75 x H 2  
D-Shape lens  
Dimensions (mm) : W 100 x D 50 x H 20

#### Prism

Dimensions (mm) : 50 x 50 equilateral  
Mains Supply : 230V  $\pm$ 10%, 50Hz

#### Included Accessories

Different Shapes of slits : Mirror Stand  
Lens Stand : Ray Table  
Viewing Screen : Two Optical Pins

Note: Specifications are subject to change.