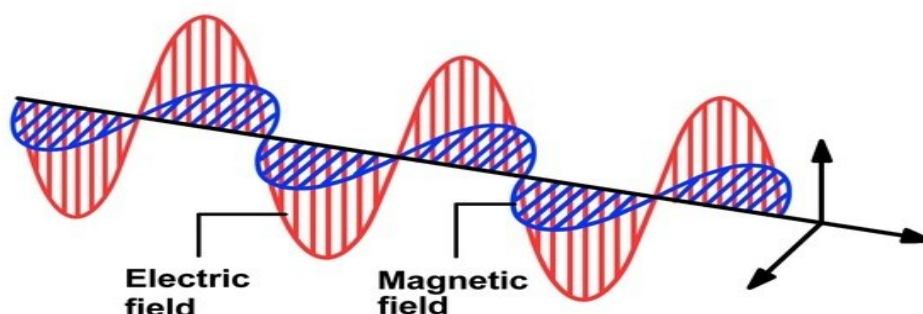
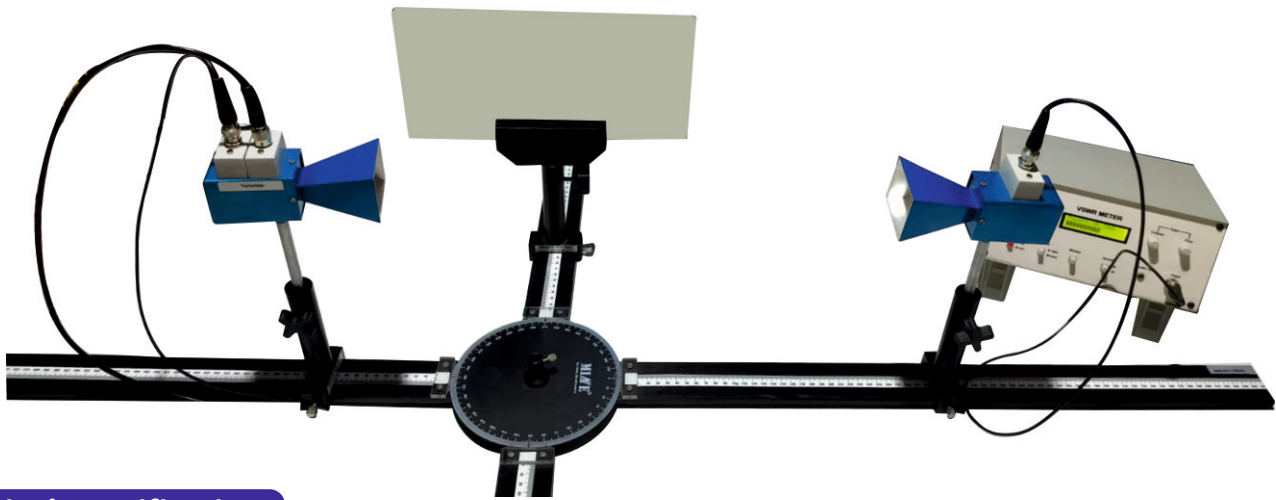


Microwave Optics System is a useful training system for the Laboratories. It helps the student to learn about Wave Properties and Propagation results. Concepts of Reflection, Refraction, Polarization, Diffraction, Interference, Standing waves and Interferometer can be understood very easily. The setup mainly consists of Microwave Transmitter, Microwave Receiver, Goniometer scale. Along with this setup a number of other accessories are provided to perform different experiments. A user friendly user guide is provided with this system to help students in perform the experiments and to understand the topic theoretically.

## Features

- A Complete set for Transmission, Reception and Measurement of relative strength
- Digital displays are provided for relative strength measurement of microwave
- Complete set of accessories for performing the experiments of Reflection, Refraction, Polarization and Interference etc.
- Provided with a detector probe for field detection



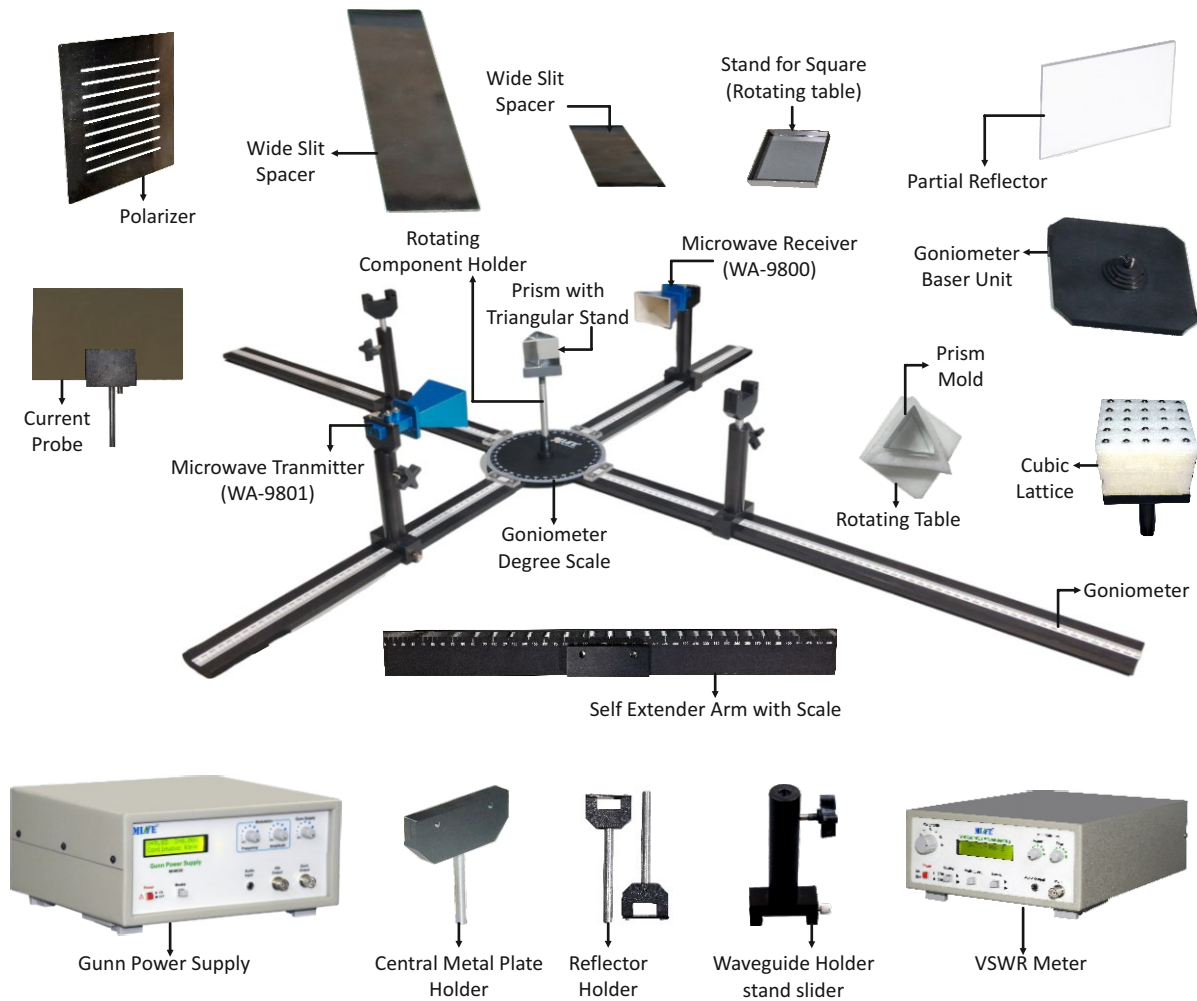


### Technical Specifications

• Input Line Voltage	:	230V, AC $\pm$ 10%, 50Hz
• Frequency of operation	:	10GHz (approx.)
• Power of Transmission	:	10 -15mW
• Operating Voltage	:	8V (approx.)
• Antennas for Transmission & Reception	:	Horn type
• Goniometer scale	:	0° to 360°
• Tone generator	:	1kHz Frequency
• Transmitter and receiver arm length	:	27.5" & 19" each (approx.)
• Display	:	Digital, Relative Measurements

### Learning's

- To Learn the Basic setup and Introduction to the given system
- To Learn the Working of Transmitter and Receiver
- To Learn the Refraction in Microwaves
- To Learn the Fabry-Perot Interferometer
- Study of Reflection
- Study of Standing waves - Measuring wavelengths
- Study of Refraction Through a Prism
- Study of Polarization
- Study of Double -Slit Interference
- Study of Lloyd's mirror
- Study of Fabry-Perot Interferometer
- Study of Michelson Interferometer
- Study of Brewster's Angle
- Study of Bragg Diffraction



### Accessories

- Microwave Transmitter (Horn Antenna) (1 Nos.)
- Microwave Receiver (Horn Antenna) (1 Nos.)
- Transmitter Scale Arm (2 Nos.)
- Receiver Scale Arm (2 Nos.)
- Goniometer Base Unit (1 Nos.)
- Goniometer Degree Scale (1 Nos.)
- Metal Reflectors (2 Nos.)
- Partial Reflectors (2 Nos.)
- Polarization (2 Nos.)
- Slit Extender Arm with Scale (1 Nos.)
- Narrow Slit Spacer (1 Nos.)
- Wide Slit Spacer (2 Nos.)
- Prism (1 Nos.)
- Ethafoam Prism Mold (1 Nos.)
- Prism stand Square (1 Nos.)
- Prism Stand Triangular (1 Nos.)
- Cubic Lattice (1 Nos.)
- Detector (Current) Probe (1 Nos.)
- Polyethylene Panel (1 Nos.)
- Waveguide holder stand with slider (1 Nos.)
- Central Metal Plate Holder (1 Nos.)
- Reflector Holder (1 Nos.)
- TNC Connectors cables (1 Nos.)
- BNC Connectors cables (2 Nos.)
- Gunn Power Supply (1 Nos.)
- VSWR Meter (1 Nos.)
- Power Cord (2 Nos.)
- Manual (1 Nos.)

## Mine Instruments Pvt. Ltd. An ISO 9001:2015 Certified Company

67-B, First Floor, Electronic Complex, Pardeshipura, Indore-452010 (M.P.) India

e-mail: [info@mineinstruments.com](mailto:info@mineinstruments.com); [sales@mineinstruments.com](mailto:sales@mineinstruments.com)

[www.mineinstruments.com](http://www.mineinstruments.com); [www.mineinstruments.in](http://www.mineinstruments.in), ☎ +91-731-4246503 📞 +91-6262603222, +91-6262603777

Regional ☎ East : +91-6262601000, West : +91-6262605000 North : +91-6262609000 South : +91-6262608000  
Emails- east@mineinstruments.com | west@mineinstruments.com | north@mineinstruments.com | south@mineinstruments.com

