





MICROWAVE OPTICS KIT

OPTIKA SCIENCE 5436

Microwave optics kit



All the components shown in the picture are included

This microwaves kit includes one transmitter, one receiver and several accessories.

It is useful to study several experiments on microwaves:

it allows students to observe that microwaves have the same characteristics of light waves and they result in the same phenomena as reflection, refraction and diffraction.











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Transmitter

- power supply: 12 V 1.5 A DC carrier wave frequency: 10.5 GHz
- wavelength: 2.85 cm
- switch between IM and EM
- BNC input

Internal modulation mode (IM)

- square wave
- modulation frequency: 676 Hz

External modulation mode (EM)

allowed frequency range: 100 Hz - 20 MHz - max amplitude: 5 V peak to

Receiver

peak

- power supply: 12 V 1.5 A DC
- max operational distance: 1.5 m
- BNC output





Jointed bench

Microwave aluminium bench with two arms, respectively 500 mm and 650 mm long. Provided with plate holder and protractor to perform quantitative measurements.

Paraffin prism

Useful to practice experiments on microwave refraction.

Polystyrene body

For experiments on microwave absorption.



Set of 4 metal plate

Dimension: 155x155 mm

- 1. Reflection plate
- 2. 11 slits grating plate
- 3. Single 50 mm slit plate
- 4. Double slit plate, single slit: 35 mm



Protractor

With an accuracy of 1°. The graduated scale is screenprinted on a polycarbonate plate for a simple and quick measurement reading.



Water tank

Useful to practice experiments on microwave absorption.



PRATICABLE EXPERIMENTS

The experiments that can be carried out concern:

- Polarization
- Diffraction
- Refraction
- Total reflection
- Reflection
- Absorption
- Propagation of microwaves











