By means of this equipment, several experiments can be carried out with the aim to confirm that the electromagnetic waves follow the same physics laws (absorption, transmission, reflection, refraction, interference, diffraction, etc.) regardless of their wavelength.
#5263 SET FOR THE STUDY OF ELECTROMAGNETIC WAVES

Contents
1. Transmission and absorption of microwaves
2. Law of Irradiation
3. Reflection of the microwaves
4. Refraction of the microwaves at any angle
5. EMW polarisation
7. Diffraction of microwaves from the edge of an obstacle
8. Diffraction from a slit
9. Diffraction from two slits
10. Diffraction from a grating

Technical data

Characteristics of the microwave transmitter
Frequency range: 11±1.1GHz
Output power: ≥10mW
Modulation input signal: 1KHz off-on music
Modulation output signal: ≥ 1Vpp
Power: 220 ± 22V 50Hz
Power consumption: ≤ 5W

Characteristics of the receiver WITH AMPLIFIER
Amplifier Gain: ≥ 60dB
Power: 220 ± 22V 50Hz
Power consumption: ≤ 5W

Supplied equipment

| 1 Microwave transmitter with power supply cable | 1 Microwave receiver with amplifier and power supply cable |
| 1 Dipole antenna with straddle clip and receiver connection cable | 1 Receiver connection cable measure instrument (test oscilloscope voltage sensor) |
| 1 Metal plate 150mm x 150mm | 1 Metal plate with 1 slit: slit width 22mm |
| 1 Metal plate with 2 slits: width of the single slit 22mm | 1 5-slit grid, width of the single slit 22mm pitch 26.4 mm |
| 1 11-slit grid: width of the single slit 3mm | 1 Paraffin prism |
| 1 Joint alignment system equipped with goniometer | 1 Plexiglas tray |
| 1 Polystyrene panel | 1 linear rule |
| 1 goniometer with pin | 1 plate holder straddle clip |