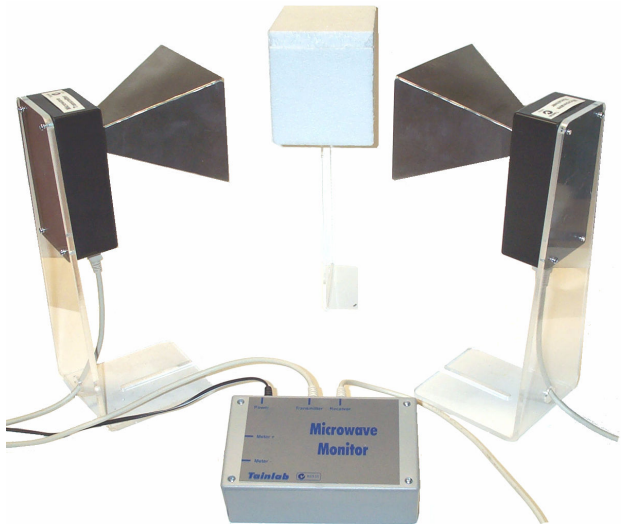
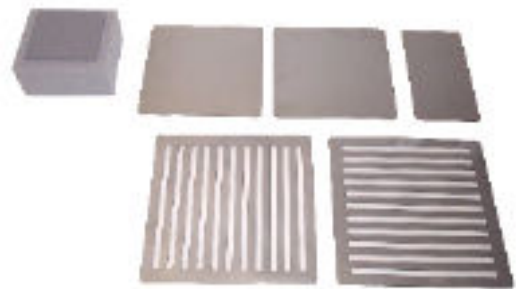


Microwave Transmitter and Receiver

Explore wave motion using microwaves to demonstrate reflection, diffraction, interference and polarisation



Microwave Transmitter & Receiver with Monitor



Microwave Optics Accessories

Catalogue No. EE110

\$460 + GST*

- Low cost, safe (10 mW transmitted power).
- Microwave monitor amplifier – connects to any voltmeter, or Tainlab interface for direct graphs

Includes...

- Microwave Transmitter & Receiver with Monitor.
- Detailed notes for experiments on reflection, absorption, polarisation and diffraction of microwaves. **Send us an email for an advance copy of the experiment notes.**
- "Foam crystal" with simulated 3-dimensional lattice structure.
- Microwave Optics Accessories...
 - two 150 mm square stainless steel plates for reflection and diffraction experiments.
 - one 80 x 150mm stainless steel plate for diffraction.
 - two slotted stainless steel polarisation plates.
 - foam absorber block

Demonstrate X-ray (Bragg) diffraction using microwaves.

At a wavelength of approximately 30 mm, it is easy to demonstrate the interference patterns generated with 3-dimensional lattice structures. By plotting the interference patterns over a range of angles, Bragg's Law can be applied to determine the spacing between planes in the lattice. See overleaf for example results.

Microwave Experiment – 'Bragg' Diffraction

Results from "foam crystal" using Tainlab Microwave Transmitter and Receiver

