

## Study of thermal radiation



### DESCRIPTION

- v The study of thermal radiation is delivered complete with instrumentation and includes a technical and instruction manual.
- v Designed for different levels and various fields of study.
- v Designed and manufactured to industrial standards.

### SUGGESTED APPLICATIONS

Study of thermal radiation

Emission – absorption.

Demonstration of KIRCHOFF's law, LAMBERT's law and inverse square law

Temperature measurement by infrared.

- **Guidance rails**  
Anodized aluminum section - graduated  
Mounted on adjustable feet.
- **Infrared thermometer**  
output : 4-20 mA with laser aiming device
- **Heat source**  
Mounted on a graduated rotary support  
Heating element : 675 W  
Extension black body – high efficiency  
Variable SSR power  
PID numerical control
- **Various aluminum plates equipped with pt 100  $\Omega$  probes**  
Shiny black plate  
Mat black plate  
White plate  
Non-painted plate
- **Radiometer : ranges 0 to 1000 mW/cm<sup>2</sup>**  
Radiance measurement probe 0.2-1000 W/m<sup>2</sup>  
Measurement probe in photopic illumination
- **Instruments**  
Plate temperature indicator  
Surface temperature indicator  
(infra-red thermometer)  
Programmable temperature regulator PID
- **Ventilated light source that can be oriented**  
Halogen ampules 50 and 100W  
Focusing lens
- **Optical accessories**  
Filters (blue, green, red, yellow)  
Diaphragms and slit  
Easily adjusted on the graduated rail

## UTILITIES

Electricity : 230 V single-phase - 50/60 Hz - 16 A

## DIMENSIONS

Length : 2000 mm  
Width : 500 mm  
Height : 900 mm  
Weight : 30 kg