



**Product Name:** 

Radiation Errors in Temperature Measurement

**Product Code:** 

ALABS-A104-309



## **Description:**

## **Radiation Errors in Temperature Measurement**

A small scale bench top accessory designed to experimentally investigate how measured temperatures can be influenced by the effects of radiation, temperature sensor design and surface finish. Three temperature sensors of different form and surface finish are mounted centrally in a circular stainless steel duct that is surrounded locally by an electrical heater.

An additional temperature sensor records the temperature of the inside of the heated duct adjacent to the centrally mounted thermocouples. A radiation shield may be raised or lowered over the centrally mounted thermocouples to investigate the effects of shielding.

## Specification:

A small scale bench top accessory
designed to experimentally investigate how measured temperatures can be
influenced by the effects of radiation, temperature sensor design and
surface finish.

- Three temperature sensors of different form and surface finish are mounted centrally in a circular stainless steel duct that is surrounded locally by an electrical heater .An additional temperature sensor records the temperature of the inside of the heated duct adjacent to the centrally mounted thermocouples.
- A radiation shield may be raised or lowered over the centrally mounted thermocouples to investigate the
  effects of shielding
- The circular duct is mounted on the discharge from a centrifugal fan. Air from the fan is blown through the duct past the temperature sensors at a controlled velocity of between 0 and 8m/s. The air velocity is measured by an in duct anemometer.



## **Equipments Exporters**

**Website:** www.equipmentsexporters.com, **Email:** sales@equipmentsexporters.com **Address:** 75, Lajpat Nagar-IV, New Delhi-110024 **Phone:** +91-9311469084