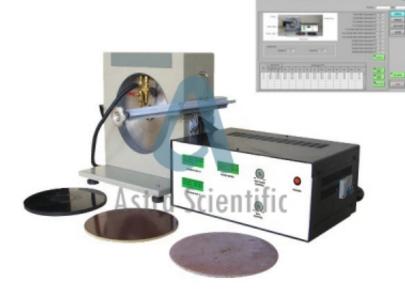
Product Code : HeatMassLab0011



### **Description :**

Astra Scientific Guarded Hot Plate with data acquisition

### **Technical Specification :**

The Offers basic experiments bench top unit is for testing of thermal conductivity of non-metallic materials using guarded hot plates bases on ASTM C177-04.

The equipment consists of a central heater with hot plates, a guard ring with heater and hot plates, and two water-cooled cold plates. Two specimens are inserted between the hot plates and cold plates. The assembly is encased in a test cabinet with insulation. The cold plates are clamped together to provided a uniform pressure.

The experimental unit is equipped with temperature sensors at the inlet and outlet of the air duct. The air velocity is measured to determine the airflow rate. Heating power and flow rate are adjusted and displayed via the software.

The microprocessor-based instrumentation is well protected in the housing. The software consists of software for system operation and for data acquisition and educational software. is connected to the PC via USB.

A service module provides power supply and heater control unit, power measurement unit and temperature indicators.

## FEATURES:

- Determination of thermal conductivities k for different material at different temperatures
- Thermal conductivity of solid can be calculated.
- Ideal for group studies & demonstration.
- Panelized instruments mounted on a control panel.
- Easy to operate.
- Useful for institutions, research laboratories & insulating powder manufactures
- Functions of the software: educational software, data acquisition, system operation

## SPECIFICATION:

• Hot plate

Hot plate heater: 500 W with control knob.

Guard ring heater: 500 W with control knob.

- Cold plates:
- Measuring ranges

temperature: 2x 0...325°C

Heating power: 0...450W

- The unit requires outside water supply.
- Required for Operation

230V, 50Hz, 1 phase

230V, 60Hz, 1 phase; 120V, 60Hz, 1 phase

# **Astra Scientific**

www.astrascientific.com, Email: info@astrascientific.com

Address: K-88, 20th Street, Annanagar, Chennai, India – 600040 Phone: +91-8860605265

