

**Product Name :**  
Computerized Thermal Conductivity of Powder**Product Code :**  
HEMT0008**Description :**

Computerized Thermal Conductivity of Powder

**Technical Specification :**

The heat transfer insulating powder trainer unit consists of two thin wall concentric copper spheres. The inner sphere houses the heating coil. The experimental unit is equipped with temperature sensors inside and outside of the concentric copper spheres. Heating coil is made up of nichrome wire wound on mica sheet. The insulating powder packed between two shells. Power supply to the heater is given through a dimmer stat & is measured by voltmeter & an ammeter. Temperature can be measured with the help of thermocouples. Four thermocouple are embedded on inner sphere and six thermocouples are embedded on outer sphere. The entire ten-temperature indicator, these reading enable of insulating powder. The microprocessor-based instrumentation is well protected in the housing. The software consists of a software for system operation and for data acquisition and an educational software.

**FEATURES:**

Determination of thermal conductivities  $k$  for different powder at different temperatures  
Thermal conductivity of insulating powder 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

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**SPECIFICATION:**

Insulating powder Asbestos magnesia commercially available powder and packed between the two spheres.

Radius of the inner copper sphere: 50mm

Radius of the outer copper sphere: 100 mm

Heater Mica Type :

Heating power: 350W

Temperature limitation: 95°C

Measuring ranges :

Temperature: 2x 0...325°C

Heating power: 0...450W

Required for Operation :

230V, 50Hz, 1 phase

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

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