

Product Name :
Thermo Electric Heat Pump**Product Code :**
ALABS-A143-006**Description :**

Thermo Electric Heat Pump

Technical Specification :

Thermo Electric Heat Pump

Small-scale accessory designed to demonstrate the use of a Peltier device to transfer heat across surfaces

Comprises a Peltier device, a heater, and a water-cooled heat exchanger

Heat transfer rates up to 68 Watt

Heater power, Peltier drive and cooling flow rate all fully electronically adjustable under computer control.

Measurement of cooling water temperatures and flow to allow an overall energy balance

The accessory is mounted on a PVC baseplate, which is designed to stand on a bench and connect to the heat transfer service unit without the need for tools.

A comprehensive instruction manual is provided.

Technical Details:

The thermo-electric Peltier device is positioned in a heat transfer path, between two copper blocks, extracts heat from one block (cold reservoir) and transfers it to the other block (hot reservoir). In order to measure the heat

transfer rate, the cold reservoir is fitted with an electric heater.

The heat extracted is transferred to the hot reservoir, together with heat generated by the electrical supply to the peltier device. This heat is removed by a water-cooled heat exchanger. The flow rates can be adjusted to provide a range of operating temperatures.

The Peltier device can also be used to generate a small quantity of electric power when a temperature difference is applied. Instrumentation is provided to measure the temperatures of the blocks, the electric power supplied to the Peltier device, the cooling water flow rate and the cooling water temperature rise.



Equipments Exporters

Website: www.equipmentsexporters.com, **Email:** sales@equipmentsexporters.com

Address: 75, Lajpat Nagar-IV, New Delhi-110024 **Phone:** +91-9311469084