LAB ENGINEERING

Email :
purchase@elabengineeringequipments.com
Phone: +91-9811375383

Product Name : Multi Heat Exchanger with Data Acquisition	**Product Code :** HEMT0012

Description :

Multi Heat Exchanger with Data Acquisition

Technical Specification :

The basic experimental apparatus is used for studying of three types of heat exchangers namely-concentric tube, shell and tube, and plate-under parallel or counter flow conditions.
The unit consists of the three heat exchangers, and a service module.
The module comprises a hot water tank with a transfer pump and instruments for monitoring and control.
Selection of the heat exchanger is simply done by opening a valve and changing from parallel to counter flow is by switching two flexible hoses.
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.
The unit requires outside water supply.
FEATURES:
Comparison of heat transfer for concentric tube, shell and tube, and plate heat exchanger.
Demonstration of heat transfer under parallel or counter flow.
Demonstration of batch type heat transfer for jacketed vessel.
Determination heat transfer coefficient.
Effects of flow rate and temperature difference.
Functions of the software: educational software, data acquisition, system operation.
Useful for institutions, research laboratories & insulating powder manufactures.
SPECIFICATION:
Heat exchangers :

Concentric tube: 2 sections of stainless steel inner tube with clear acrylic casing.
Shell and tube: Stainless steel inner tubes with clear acrylic casing.
Plate: Stainless steel multiple plates.
Service module consisting of :
Hot water tank and pump.
Heater: 3000 W.
Temperatures: 14 ea.
Flow meters: Hot water and cold water.
Temperature control unit: 1 ea.
Stainless steel jacketed vessel with coil and stirrer
Vessel content :
With a temperature sensor.
Jacket heat transfer area approximately 600 cm2
Coil heat transfer area approximately 350 cm2
Stirrer: 0- 500 rpm
Measuring ranges :
Temperature: 2x 0…325°C
Heating power: 0…3000W
Required for Operation :
230V, 50Hz, 1 phase
230V, 60Hz, 1 phase; 120V, 60Hz, 1 phase