Computerized Thermal Conductivity of Liquid (Product Code: HMTC12)



Features

- Extensive range of Experiments
- Comprehensive teaching manual
- Three-year warranty
- Esthetically designed and finished Rig.
- High Quality instrumentation
- To determine thermal conductivity of liquid.

Product Description

This equipment allows student to determine the thermal conductivity of a poor conducting liquid, like liquid glycerin. All the heat transfer experimental setup is of single unit, consists of a Powder Coated M.S Panel.

Plot No: 34/G, 4TH Main 3RD Phase Peenya Industrial Area, Bangalore - 560 056.
Ph.: +91 9740987814
Email: info@legionbrothers.com, sales@legionbrothers.com. www.legionbrothers.com

Computerized Thermal Conductivity of Liquid (Product Code: HMTC12)

Product / Component Specification

Pipe Specification	Diameter : 100mm Material : Brass Length : 90mm
Mica heater	Diameter : 90mm
Cooling Plate diameter	100mm
Thickness of liquid	40mm
Thermocouple	T type
Digital voltmeter	0-300 volts AC
Digital ammeter	0-5 Amps AC
Digital temperature	0-199.9 Deg (T Type)
Variac	0-2 Amps

Data Acquisition card

Analog Input	
Differential Channels	12
Resolution	12 bits
Sample Rate	200 Ks/s
Max Voltage	5 V
Number of Ranges	4
Simultaneous Sampling	Yes
On-Board Memory	5120 samples
Analog Output	
Channels	2
Digital I/O	
Input-Only Channels	30
Output-Only Channels	12
Timing	Software
Logic Levels	TTL
Maximum Input Range	0 V - 5V
Maximum Output Range	0 V - 3.3 V
Counter/Timers	
Counters	2
Max Source Frequency	84 MHz
Resolution	12 bits
Logic Levels	TTL
Total DC output Current on all I/O lines	130mA

Measurement of Temperatures at different points

Type Range Signal conditioning/transmitter Location	"K" 0-300°C Standalone Water Inlet Temperature
Type Range Signal conditioning/transmitter Location	"K" 0-300°C Standalone Water Outlet Temperature
Type Range Signal conditioning/transmitter Location	"K" 0-300°C Standalone Sample Liquid Inlet Temperature
Type Range Signal conditioning/transmitter Location	"K" 0-300°C Standalone Sample Liquid Outlet Temperature

Measurement of Voltage & Current

Type Range Signal conditioning/transmitter	Voltage Transducer 0-300V Standalone
Type Range Signal conditioning/transmitter	Current Transducer 0-10Amps Standalone

Plot No: 34/G, 4TH Main 3RD Phase Peenya Industrial Area, Bangalore - 560 056.
Ph.: +91 9740987814
Email: info@legionbrothers.com, sales@legionbrothers.com. www.legionbrothers.com