

TIME CONSTANT OF THERMOCOUPLES & THERMOMETER

Make : **ETHER**
Model No : **EE-1683**

DESCRIPTION

The setup consists of a Heat source controlled with the help of digital temperature controller at any preset value. A thermometer/thermocouple pocket is provided to insert the thermometer/thermocouple in it. The time constant of different thermometer/thermocouple can be calculated with the set-up. A stopwatch is also provided for measurement of time. A Heat sink is fitted to cool down the thermometer/thermocouple. All components are assembled on a base plate to form table top set-up.

EXPERIMENTATION

- To determine time constant of a given thermometer/thermocouple

UTILITIES REQUIRED

- Electricity Supply : 220 V AC, Single Phase, 0.5kW.
- Ice.
- Table for set-up support



TECHNICAL DETAILS

- Heat Source : Provided with Ceramic insulation.
- Heater : Nichrome Wire Heater, 200 Watt approx.
- Temp. Transmitter : Input Thermocouple, Output 4-20 mA
- Temp. Controller : Digital Temperature controller, 0 to 199.9°C
- ICE Pot : Compatible capacity.
- Thermocouple : Fe-Constantan (J-type)
- Thermometer : Glass Thermometer, Range 0-100°C.
- Instruction Manual : An ENGLISH instruction manual will be provided along with the Apparatus
- The whole unit is assembled rigidly on a panel plate.
- The whole set up is well designed and arranged on a rigid structure painted with Industrial PU paint