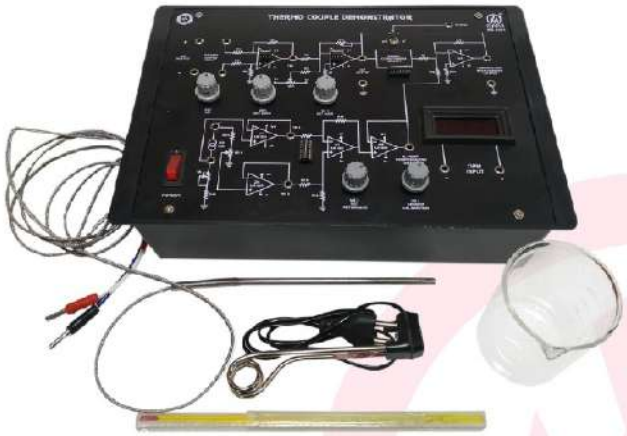
Instrumentation Lab

ME 1054 - Thermocouple Trainer Kit

Objective:

- To calibrate & measure temperature using K-Type Thermocouple.



Technical Specifications:

- Output voltage : +5V DC Fixed
- Meter (Digital) : 3½ Digit LED Display
  Milli volt Source : -10 to + 25, mVolt (Approx.)
- Transducers : Type 'K' (Chromel - Alumel) Thermocouple.

Signal Conditioner Circuit :

- First Stage Amplifier : DC Differential (Gain -10)
- 2nd Stage Amplifier : Summing amplifier with zero and Gain (1-25) adjustment
- Power Source : ±5VDC
- Room Temp. Compensation Network : AD 590 based calibration circuit
- Circuit Diagram : Screen printed on front panel
- Housed in PVC cabinet, all important output, control switches & test point brought out at Glass Epoxy (PCB) front panel.
- Dimensions : 330mm x 230mm x 85mm
- Weight : 2.5 Kgs Approx.
- Power Requirement : 220VAC ±10%, 50Hz

Standard Accessories:

- K-Type Thermocouple, Thermometer, Beaker, Immersion Rod, power chord, patch chords & instruction manual.

ME 1056 - Speed Measurement using Photo Electric & Magnetic Sensors

Objective:

- To measure speed of DC Motor using Photo Electric and Maganetic Sensors.

Technical Specifications:

- Output voltage : +5V DC Fixed
  : 0-8VDC Variable
- Meter (Digital) : 3½ Digit LED Display RPM Meter (Resolution 1 RPM)

DC Motor Unit:

- DC Motor mounted with Metallic disk, Photo Electric (Photo Transistors & light source) and Magnetic (Proximity sensor) Sensors.
- Circuit Diagram : Screen printed on front panel
- Housed in PVC cabinet, all important output, control switches & test point brought out at Bakelite front panel.
- Dimensions : 330mm x 230mm x 85mm
- Weight : 2.5 Kgs Approx.
- Power Requirement : 220VAC ±10%, 50Hz

Standard Accessories:

- K-Type Thermocouple, Thermometer, Beaker, Immersion Rod, power chord, patch chords & instruction manual.

Other model also available:

ME 1056A - Speed Measurement using Photo Electric Sensor
--do-- same as ME 1056 but with Photo Electric (Photo Transistor)Sensor only

ME 1056B - Speed Measurement using Magnetic Sensor
--do-- same as ME 1056 but with Magnetic (Proximity) Sensor only

ME 1057 - Inductive Pick UP

Objective:

- To measure the linear displacement of the magnetic core using Micrometer.

Technical Specifications:

- Output voltage : ±12V DC & +5V DC Fixed
- Meter (Digital) : 3½ Digit LED Display
- Potentiometers : Three potentiometers
  P1 for maximum, P2 for minimum and P3 for Gain Control and Buck adjustment.
- Inductive Pick Up : Mounted on the front panel.
- Micrometer : 25 - 50mm (Least count on 10 microns.)
- Circuit Diagram : Screen printed on front panel
- Housed in PVC cabinet, all important output, control switches & test point brought out at Glass Epoxy (PCB) front panel.
- Dimensions : 430mm x 230mm x 85mm
- Weight : 3 Kgs Approx.
- Power Requirement : 220VAC ±10%, 50Hz

Standard Accessories:

- Power chord, patch chords & instruction manual.