



52003A provides study of Strain Gauge and their application for measurement of Strain, It helps to study bridge configuration of Strain Gauge and the signal conditioning circuits required to measure Strain. It uses cantilever beam arrangement to produce Strain on Strain Gauge.

The Strain Gauge are firmly cemented to the cantilever at the point where the strain is cantilever.

Strain developed changes the resistance of Strain Gauge which is detected by full bridge configuration. Seven segment LED display shows strain in micro strain units. Different weights are provided to perform linearly and sensitivity experiments.

Object:

01. To study strain measurement using strain gauges and cantilever assembly.
02. To determine the linear range of operation of strain measurement.
03. To determine sensitivity of the trainer.

Features

The board consists of following built in parts

- 01 $\pm 12V$ D.C. at 100mA, I.C. regulated Power Supply.
- 02 $5V$ D.C. at 100mA, I.C. regulated Power Supply.
- 03 IC for comparison of Strain Gauge.
- 04 Strain Gauge of 1kg with 200mV output.
- 05 DPM of 3½ digit display for micro strain..
- 06 Adequate no. of other electronic components.
- 07 Mains ON/OFF switch and fuse.
- 08 The unit is operative on $230V \pm 10\%$ at 50Hz A.C. Mains.
- 09 Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections/ observation of waveforms.
- 10 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.
- 11 Weight : 2 Kg. (Approx)
- 12 Dimension : W 340 x H 73 x D 210

List of Accessories:

- 01 Iron weight 10Nos of 100gm total weight 1Kg.

Note: Specifications are subject to change.