

# Measurement of Load using Load Cell with Digital Display

**Model : SE-1017**



**SINCOM SE-1017 Measurement of Load using Load Cell Trainer** is a versatile and comprehensive trainer specifically designed for measuring load using a load cell. With its advanced setup, this trainer offers an output voltage that accurately reflects the applied weight on the bridge network. It features a Digital LED Display for easy weight visualization, a mechanical load cell arrangement with various weights for practical experimentation, and the added convenience of null and calibration control. This trainer is an essential tool for anyone involved in load measurement and calibration.

## Features

- ❖ Load Cell Transducer
- ❖ Easy Null and Calibration Control
- ❖ Digital LED Display
- ❖ Mechanical Load Cell arrangement
- ❖ Wide load measurement Range
- ❖ In-Built Fixed regulated DC Power Supply
- ❖ Presents a multi-color Circuit Diagram printed on the front panel of the white board
- ❖ Enclosed in an attractive, light weight, High Quality, Poly Coated Imported Pine Wooden cabinet
- ❖ Interconnections by 2mm high quality banana sockets and pins.

## Technical Specifications

▪ AC Mains Power Supply	: 230V $\pm$ 10%, 50Hz
▪ Fixed Regulated DC Power Supply	: $\pm$ 5V /500mA
▪ Transducer	: Load Cell
▪ Bridge	: Resistive Bridge
▪ Instrumentation Amplifier	: Two OP-AMP based



An ISO 9001:2015 Co.

- |                           |  |
|---------------------------|--|
| ▪ Load Output             | : In volts   |
| ▪ Load Display            | : Red Color 3 <sup>1/2</sup> Digit LED Display           |
| ▪ Maximum Weight capacity | : 2 Kg   |
| ▪ Load Setup              | : Mechanical Load cell arrangement with D Type connector |
| ▪ Assorted Weights        | : 1 Kg   |
| ▪ Null Control            | : By Potentiometer                                       |
| ▪ Calibration Control     | : By Potentiometer                                       |
| ▪ Weight                  | : 5.0 kg (approx)  |
| ▪ Dimensions (mm)         | : L 270 x W 390 x H 130                                  |
| ▪ Interconnections        | : 2mm Banana sockets                                     |
| ▪ Operating Temperature   | : 0-55 <sup>0</sup> C, 80% RH                            |

### Learning Scope

- To study the operation of a Load Cell Transducer.
- To Observe and note the output voltage  $V_o$  w.r.t. change in weight on load cell.
- To control Null and calibrate the output display proportional to the applied weights.

### Other Instruments Required : Nil

**Accessories Included :** Mechanical Load Cell Arrangement, Assorted weights upto 1Kg ,Patch Cords, Detail Instruction Manual.