

Pressure Measurement Trainer



Product Categories: [Electronics](#), [Engineering Equipment](#), [Instrumentation Lab](#), [Instrumentation Lab](#)
Product Page: <https://www.labappara.com/product/pressure-measurement-trainer/>

Product Description

Pressure Measurement Trainer

The setup:

The setup comprises of air pump (Foot pump) to build pressure

A bourdon tube dial gauge will be fixed to the pressure chamber parallel to the pressure transducer

Pressure transducer is of diaphragm type on which strain gauges will be bonded

Display unit:

The display unit comprises of inbuilt power supply, Strain gauge signal conditioner, amplifier and Analog to Digital converter

The power supply provides power for signal conditioning and amplifiers, ADC and also for strain gauge excitation

The system provides front panel bridge balancing through potentiometer adjustment

The instrument is calibrated to read the pressure directly in Kg/cm²

The whole system is self-contained with all accessories included

The instrument is enclosed in a tapered fiberglass box and all necessary test points are brought out with schematic circuitry for understanding the working of the instrument

The system operates on 230V AC Supply

Specification:

Pressure source: Foot operated air pressure pump to build

Pressure max. 7Kg/cm²

Dial gauge: Bourdon tube pressure gauge of 10 Kg/cm²

Pressure Transducer: Diaphragm type strain gauge based sensor

Range 10 kg/cm²

Strain gauges: 350 ohms resistance, gauge factor 2 - 2.1

Display: 3 1/2 Digit 7 segment LED Display

Excitation Voltage: 10 V

Accuracy: 1%

Resolution: 0.01 Kg/Cm²

Operating Temperature: 5 to 55o C

Connection: 2 mt 4 core shielded cable with connectors

Power Supply: 230 V +/- 10% 50 Hz