



## Description:

PT-1000 Trainer introduces students to Pressure transducers, signal conditioning circuits and display devices through a wide range of practical activities. The study module includes transducers and instrumentation trainer and a curriculum manual Detailed experiment manual is supplied with the trainer.

## Sensors:

- Differential input Pressure Transducer
- Full Bridge Configuration

## Pressure Vessel:

- Material Stainless Steel
- Pressure Gauge 0 to 50 psi
- Safety Valve 0 to 100 psi
- Max. bearable pressure 100psi

## Input Circuit:

- Solenoid Valve
- Wheatstone Bridge

## Signal Conditioning Circuitry:

- Differential Amplifier
- x 100 Amplifier
- Instrumentation Amplifier x 50 Gain
- DC Amplifier,  $\pm 2.5V$  offset, x 50 Gain
- Comparator
- Electronic Switch
- Relay

## Output Circuit:

- Digital Voltmeter with  $3\frac{1}{2}$  digit LED Display
- Buzzer
- LED Bar Graph

## Power Supply:

- DC Supply:  $\pm 12V$ ,  $\pm 5V$
- Variable DC Supply: 1V to 10V.
- 230 V  $\pm 10\%$ , 50 Hz

## Accessories:

Power Cord, User Manual, 2mm banana Patch Cords.



## Features:

- A self contained Trainer
- Transducers installed on-board
- Control Circuits Installed
- Functional Blocks indicated on
- Protection Circuits Installed
- Built in DC Power Supply
- Devices Installed

## Experiments:

- Introduction to Transducers and instrumentation
- Characterizations Pressure Sensor
- Determining Sensitivity of Sensor
- Determining the cut off of Pressure Transducer
- Working of Differential Pressure Transducer MPX4250
- Wheatstone Bridge Measurement

**Dimensions:** 13.5 x 14 x 6 in  
**Weight:** 3.5Kg

