OPTICAL TRANSDUCER TRAINER

OT-1000

TECHNICAL Bulletin









Description:

OT-1000 Trainer introduces students to optical transducers like Photovoltaic cell, Photo transistor etc. signal conditioning circuits and display devices through a wide range of practical activities. The study module includes optical transducers and instrumentation trainer and a

Sensors:

- Photovoltaic Cell
- Photoconductive Cell
- Photo Diode
- Photo Transistor

Light Source:

o 12 volt Lamp, 7 W

Input Circuit:

- Wire wound potentiometer
- Slide potentiometer

Signal Conditioning Circuitry:

- Current Amplifier
- Power Amplifier
- ODC Amplifier, ±2.5V offset, x 50 Gain
- Light intensity control

Output Circuit:

 Digital Voltmeter with 31/2 digit LED Display.

Power Supply:

- ODC Supply: ±12V, ±5V
- Variable DC Supply: 1V to 10V.
- ○230 V ±10%, 50 Hz

Accesories:

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

Dimensions: 13.5 x 14 x 6 in

Weight: 3.5Kg



Features:

- A self conatined Trainrer
- 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 of IC Photovoltaic Cell
- Characterizations of PIN Photo diode
- Characterizations Light Dependant Resistor
- Characterizations of Phototransitor
- Wheatstone Bridge Measurement
- Characteristics Light Controller ON/OFF system

