

MICROWAVE TEST BENCH (GUNN BASED)



SCOPE

The MI2000 series of Microwave Test Benches are precision made microwave systems, which use standard type rectangular wave-guide components to illustrate the essential elements of this field for study. These Training Benches are completely self-contained & provided with the means to allow students to carry out practical work at extremely low cost. A comprehensive manual containing extensive microwave theory and a progressive series of assignments is supplied with the Trainer.

Features:

- A selection of wave-guide components
- The power supply for microwave source
- A meter, which monitors the detector output
- Wall Chart Experiment

Experiments

- Study the V-I characteristics of Gunn Diode.
- To determine the frequency & wavelength in a rectangular waveguide working TE₁₀ mode
- To study unknown impedance with smith chart
- To study the square law behavior of a microwave crystal detector
- To study the variable attenuator
- To study the square law behavior of a microwave crystal detector
- To study the E plane TEE, H Plane TEE
- To study MHD Coupler

VSWR Meter	:	1
Gunn Power Supply	:	1
PIN Modulator	:	1
Detector Mount	:	1
Variable Attenuator 20dB	:	1
Frequency Meter, DR	:	1
Gunn Oscillator	:	1
Isolator	:	1
Matched Termination	:	1
E Plane Tee	:	1
H Plane Tee	:	1
Slotted Section	:	1
Tunable Probe	:	1
Magic Tee	:	1
MHD Coupler 10 dB	:	1
MHD Coupler 3 dB	:	1
Fixed Attenuator 10dB	:	1
Fixed Short	:	1
Movable Short	:	1
Wave Guide Stand	:	4
Cooling Fan	:	1
ACCESSORIES		
BNC to BNC Cable	:	
N to BNC Cable	:	
Operating manual	:	
Mains Cord	:	



Note : Specifications can be altered without notice in our constant efforts for improvement.

MICROLINE INDIA

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MI 101 GUNN POWER SUPPLY



This is a Microcontroller based Equipment with LED/LCD display. The very important feature of this instrument is the simultaneous display of Voltage and Current which is the basic and necessary requirement of V-I Characteristics experiment.

Here different Modulation Modes are single switch selectable with display on LCD.

For PC to PC Data Communication Experimental Software is provided with this instrument Power is a state of art solid state regulated Power supply for operating low power GUNN Diode.

It incorporates number of proprietary features.

Technical Specifications

Display : LED / LCD Display x 2 nos. Voltage
Range : 0 to 12V
Current : 1A max
Stability : 0.1% for +10% mains variation

Ripple : 1mV rms

Modulating Frequency : 800 to 1200 Hz Modulating
Voltage: 0 - 10Vpp variable
Modulation Modes :
Continuous Wave

Internal Modulation (Square Wave)

Audio Modulation PC Data Modulation

PC-Interface : RS -232 Output
Connector : BNC for Gunn Bias
N-Type connector for Pin Bias

PowerSupply : 220V±10%,50Hz

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