# DELORENZO

Engineering Training Solutions

### **Telecommunications**

## DL 2594N Microwaves trainer



#### MAIN TOPICS

The trainer has been designed to introduce students to the microwave technology. It consists of a set of components, accessories and instruments and can be used as a laboratory test bench to experiment with the microwaves components as well as to study the aspects of wave propagation.

Our 3 cm. waveguide trainer provides users with an in-depth training on frequency transmission characteristics and gives students the possibility to perform all the main exercises in this field. The trainer is provided complete with a detailed educational manual.

The trainer includes the following components: variable attenuator, crystal detector, directional coupler, shorting plate, matched terminator, waveguide to coaxial adaptor, waveguide, frequency meter, Gunn oscillator, PIN modulator, 6dB and 20dB fixed attenuators, hybrid tee, horn antenna, slotted line, slide screw tuner, function generator, power supply, power meter, SWR meter.

Operating frequency: 8.2 - 10.2 GHz

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### Examples of exercises:

- The Gunn oscillator
- PIN diode modulator and detector
- Propagation modes, wavelength and phase velocity in a waveguide
- Q and bandwidth of a resonance cavity
- Power measurement
- Standing wave ratio (SWR) measurement
- Impedance measurement
- Basic properties of a directional coupler
- Attenuation measurement
- Study of a waveguide Hybrid-T



#### **COMPONENTS INCLUDED:**

Power meter **SWR METER Function Generator Power Supply** Gunn Oscillator **PIN Modulator** Frequency Meter Variable Attenuator Slotted line Hybrid Tee **Crystal Detector** Waveguide **Matched Termination** Slide Screw Tuner Horn Antenna Coaxial Adapter Fixed Attenuator 6dB Fixed Attenuator 20dB **Directional Coupler** Waveguide Stands Shorting plate Screws and nuts

