

Basic Antenna Trainer has been designed to provide useful tools for hands on experimentation and teaching of various commonly used antennas in UHF-Microwave band in the laboratory for students of all levels. It can be used in stand-alone mode. In this system, receiving antenna is rotated manually from 0 to 360 degrees and accordingly the signal strength can be monitored on the Receiver. It comes with a Polar plotting software for storing readings manually

The system consists of a set of two tripods one for mounting the transmitting antenna and another for mounting the receiving antenna, 11 Antennas, RFTransmitter/Receiver, Antenna Plotting Software and relevant accessories/cables.

Network Analyser: RF Transmitter & Receiver:

86 - 860 MHz PLL synthesized Frequency Step Size 0.05, 0.1, 0.25, 0.5, 1, 10, 100 Mhz

Accuracy 0.01%

Display 16X2 Backlit LCD

Functions Menu, Enter, Escape, Up & Down

Memory Location 1000 individual frequencies and level can be stored/recalled

Output Impedance

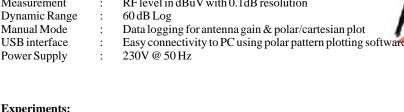
90 dBuV Typical **RF**Level

RF level in dBuV with 0.1dB resolution Measurement

Dynamic Range

Manual Mode

Power Supply



Experiments:

- Variation of field strength with distance
- Plot radiation pattern of omni directional antenna
- Plot radiation pattern of directional antenna
- Polarization of vertical and horizontal antenna
- Study resonant and non resonant antenna
- Demonstrate reciprocity theorem of antennas
- Study current distribution along the element of antenna
- Study different antennas polar plots, radiation patterns, gain, beam width, front back ratio
- Comparison of different antennas

Shipping List:

Antennas

- 01. Dipole L/2
- 02. Dipole L/4
- 03. Dipole 3L/2
- 04. Folded Dipole
- 05. Yagi Uda (3E)
- 06. Yagi Uda (4E)
- 07. Ground Plane with Reflector & Director
- 08. Endfire (Phase Array L/2)
- 09. Square Loop
- 10. Zepplin/ Horizontal End Feed
- 11. Broadside Array L/2

Other Accessories

- a. RF Transmitter Tripod & Receiver Tripod
- b. Experimental Manual
- c. Antenna Plotting Software CD

Note: Specifications are subject to change.

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