Phone: +91-9896600003
Email : sales@naugralabequipments.com

Product Name :	**Product Code :**
Antenna Trainer with 11 Antennas	NLAB-ELECTRONICSAB200014

Description :

Antenna Trainer with 11 Antennas

Technical Specification :

The desktop Antenna Training System has been specially designed for engineering colleges and training centers. It is very useful for introducing practical verification of antenna operation to the students. The work book provides theoretical concepts and detail procedure of experiments with each type of antenna.

The training system includes set of modular mechanical elements forming various antennas, a transmitter unit and a detector unit. All the accessories are packed in a convenient carrying case.

The Antenna Training System also comes with Motorised Antenna Unit to automate the recording of the radiation pattern of the antennas. The Motorised Antenna Unit consists of a Microcontroller based system for Capturing, Displaying and Printing of Antenna radiation pattern. The system capture signal at an interval of 1Â° rotation using stepper motor and radiation pattern is displayed on PC . The Windows based Software is supplied in CD Rom. The PC Communication is via RS232 port.

Technical Specifications

Waveforms : Sine

RF Generator : 750 MHz approximately (output adjustable)

Tone Generator : 1 KHz approximately (output adjustable)

Directional Coupler : Forward & Reverse (selectable)

Matching Stub : Slider type

Antenna Rotation : 0-360 deg. Resolution 1 deg.

Receiving Antenna : Folded dipole with reflector

Detector Display : Level adjustable meter

Interconnections : 2 mm Banana sockets

Power Supply : 230 V, Â±10% 50/60 Hz

Power Consumption : 3 VA approximately

Operating Conditions : 0-400 C, 80% RH

Weight : 3 Kg approximately

Dimensions (mm) : W 385 x D 75 x H 285

Scope of Learning

Polar plots & polarization

Wave modulation & demodulation

Antenna gain, Antenna beam width study

Element current, Front-back ratio study

Antenna matching

Antenna radiation with distance

Features

Self Contained Simple and Student Friendly platform

Hands on set-up for measuring and plotting radiation Patterns of 20 different Antennas

On board RF & Tone Generators

Antenna Matching Stub

Characteristics and SWR Measurement

Transmitting and Receiving levels observed On Built- in Meters

Functional Block indicated On- board Mimics

Fully Documented Operating Manual and Polar Charts

âÂ€ÂœAntenna kitâÂ€Â• for fabricating Special Antenna

Compact Design

Lightweight

List of Accessories (10 Antenna)

I. Antennas : 11 nos.

1. Simple Dipole l/2 : 1 no.

2. Yagi-UDA Folded Dipole (3E) : 1 no.

3. Yagi-UDA Folded Dipole (5E) : 1 no.

4. Yagi-UDA Simple Dipole (5E) : 1 no.

5. Yagi-UDA Simple Dipole (7E) : 1 no.

6. Hertz Antenna : 1 no.

7. Loop Antenna : 1 no.

8. Log Periodic Antenna : 1 no.

9. l/2 Phase Array : 1 no.

10. Detector Antenna : 1 no.

11. Helix Antenna : 1 no.

II. Current Probe : 1 no.

III. Transmitting Mast : 1 no.

IV. RF Detector : 1 no.

V. Receiving Mast : 1 no.

VI. Accessories Kit :

1. BNC âÂ€Â“Tee : 1 no.

2. BNC - BNC Adapter (M) : 1 no.

3. BNC - BNC Adapter (F) : 1 no.

4. BNC (M) - BNC (F)

Adapter (L-type) : 1 no

5. BNC âÂ€Â“ BNC Cable 25âÂ€Â• : 2 nos.

6. BNC âÂ€Â“ BNC Cable 18âÂ€Â• : 1 no.

VII. Polar Graphs (dBmA : 25 nos.

VIII. Polar Graphs

(for normalised reading) : 25 nos.

IX. Antenna Fabrication Kit

1. Two PCBâÂ€Â™s : 1 no.

2. 14 SWG wire roll 20âÂ€Â•

X. Mains Cord : 1 no.

XI. +7.5 - 9V DC Adaptor(500mA) : 1 no.