



An antenna is a device that is used to convert guided electromagnetic waves into electrical signals and vice versa (i.e. either in transmitting mode or in receiving mode of operation). Mine Antenna Trainer MI-AT22 is a bench-top antenna system design to demonstrate all concepts of an antenna operations. Student can learn easily about various type of antenna operation with their polar plot. This system comes with a motorized antenna unit to record radiation pattern automatically of any antenna mounted on it.

Learning's

- Study of Polar Plots and Polarization.
- Study of wave modulation and demodulation.
- Study of Antenna Gain.
- Study of Antenna beam width.
- Study of matching Stub.
- Study of SWR measurement.
- Study of Antenna radiation and distance.
- Plotting the Polar graph/ radiation pattern of an Antenna using software

Technical Specifications

Waveforms	: Sine
RF Generator	: 750 MHz approximately
Modulation Generator	: 1 KHz approximately
Directional Coupler	: Forward & Reverse (selectable)
Matching Stub	: Slider type
Antenna Rotation	: 0-360° (Resolution 1°)
Receiving Antenna	: Folded dipole with reflector
Detector Display	: Level adjustable meter
Interconnection	: BNC/2mm banana socket
Input Line Voltage	: 230V AC \pm 10% , 50Hz

Accessories

Antennas 22nos

1	Simple Dipole $\lambda/2$	-	1no.
2	Simple Dipole $\lambda/4$	-	1no.
3	Simple Dipole $3\lambda/2$	-	1no.
4	Folded Dipole $\lambda/2$	-	1no.
5	Yagi -UDA Folded Dipole (3E)	-	1no.
6	Yagi -UDA Folded Dipole (5E)	-	1no.
7	Yagi -UDA Simple Dipole (5E)	-	1no.
8	Yagi -UDA Simple Dipole (7E)	-	1no.
9	Hertz Antenna	-	1no.
10	Zeppelin Antenna	-	1no.
11	$\lambda/2$ Phase array	-	1no.
12	$\lambda/4$ Phase array	-	1no.
13	Combined co-linear array	-	1no.
14	Broad Side Array	-	1no.
15	Log Periodic Antenna	-	1no.
16	Cut Paraboloid Antenna	-	1no.
17	Loop Antenna	-	1no.
18	Rhombus Antenna	-	1no.
19	Ground Plane	-	1no.
20	Slot Antenna $\lambda/2$	-	1no.
21	Helix Antenna	-	1no.
22	Detector Antenna	-	1no.
•	Rods for Ground Plane Antenna (different sizes)	-	3nos.
•	Current Probe	-	1no.
•	Transmitting Mast	-	1no.
•	RF Detector	-	1no.
•	Receiving Mast	-	1no.
•	Required Connectors to perform all types of Practical's . Mains cord, Carrying case suitable DC adaptor if required	-	
•	Spectrum Analyzer (Optional)	-	

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