

BIT 3200 - ANTENNA TRAINING KIT



PRODUCT DESCRIPTION

BIT3200 Antenna Training System is including the transmission mode and augmented antenna. And according to the different types of operation there is different antenna. RF signal generator controls the direction of the antenna and provide 500MHz, 2GHz, 10GHz RF signal.

Since the Antenna Training System using higher-frequency, it is possible to do experiments of the propagation velocity in the narrow band, and it is also make the relocation and safekeeping much easier. Especially, after the radio transponder transmitting and receiving antenna appeared.

This antenna is used for satellite reception; it is used more for practical training. The quantity and distance of Dipole and anode is under control. You can gain characteristics and the right direction for independent design.

ANTENNAS PROVIDED

Half-wave Dipole Antenna

Folded Dipole Antenna

$\lambda/4$ Grounding Antenna

Full-Wave Loop Antenna

Drooping Antenna

Yagi Antenna

Spiral Antenna

Helical Antenna

Horn Antenna

Single Patch Antenna

2 Dimension Array Antenna

Circle Arranging Antenna

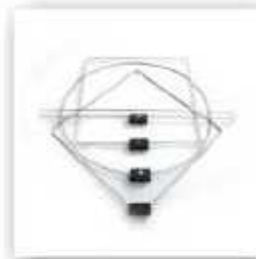
The frequency range from 500MHz-10GHz



Spiral Ant.



Microstrip Planar Array Ant.



Loops



Yagi Ant.



Monopole/Dipole Ant.



Drooping Antenna.

ANTENNA FOR EACH KIND

Using Frequency	Antenna Type	Quantity
500MHz	Dipole Ant. / Folded Dipole Ant. / Monopole / Drooping Ant. / Circular Loop / Square Loop / Diamond Loop	1 each
	Yagi Antenna	2 each
2GHz	Spiral Ant. / Monopole Ant.	1 each
	Dipole Ant.	2 each
10GHz	Rectangular Patch Ant./ Microstrip Planar Array Ant (Rectangular)/ Helical Ant. / Microstrip Planar Array Ant (Circular)	1 each
	Horn Antenna	2 each

ANTENNA TRAINER SETUP



CARRY CASE



BIT3020/ BIT3030 - RF TRAINING KIT



PRODUCT DESCRIPTION

BIT-RF3030 RF Training System settings is training to enable students through increased access to the radio frequency system's basic structure, working principle, simulation analysis, test equipment and measurement skills in a rational and perceptual knowledge.

Truly master the time domain and frequency domain, the transmission lines, radio wave propagation, antennas, RF modules, and radio frequency communications, and other basic concepts, and learn how to use important therefore test instruments.

BIT-RF3030 Training system uses Radio Frequency Modular Training for the structural design of experiments in the training provided a very simple, flexible assembly, while equipment can be integrated in a box, easy to carry and transport. The module circuit use all microstrip circuit design, have transparent plexiglass on the cover and can be clearly observed that the structure of all microstrip circuit.



ANTENNA FOR EACH KIND

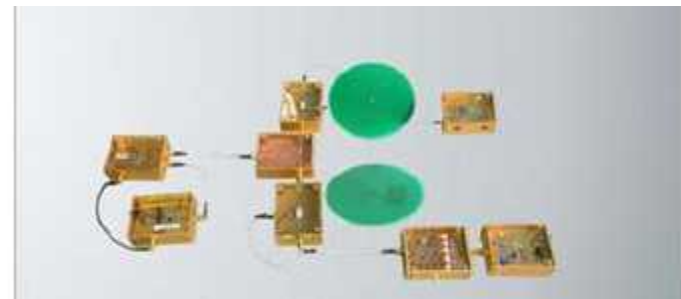
Module Types Quantity

SMA - 50 Terminal Load 3
SMA Open circuit load 1
SMA Short circuit load 1
SMA - 50JJ Connector 5
SMA - 50KK - 1 Connector 3
SMB - C - TKW1.5 -3X300Power cables linking 5
SFF - 1.5 - 50-1 Shielding Line 5
BNC - SMA Transformer 2
Coaxial Attenuator 10dB 1
Co axial Attenuator 20dB 1
Technical Notes 1
Reference Books 1

CONNECTION SET UP



Portion BIT 3030 connecting photo



Portion BIT 3020 connecting photo

BIT3000 Three Centimeters Waveguide Training System



BIT3000 Three Centimeters Waveguide Training System to provide users an in-depth training on microwave waveguide device. This training kit can be used in understanding the transmission characteristics of the frequency and all-round understanding of the way in the use of universal frequency bandwidth in the X series. This experimental demonstration of frequency can be done in most simple method using this kit.

Microwave radio communication network is very important in our daily life. For example, high-quality long- distance calls, sometimes through satellite, radio communication system can be used. A special performance of the microwave system is based on the high frequency microwave propagation direction; this feature is very similar to light. In addition, The immune function which reduces the High-intensity microwave frequency noise is an important aspect of microwave communication during long- distance transmission.

BIT3000 Three Centimeters Waveguide Training System is a very effective learning tool: The specialty of the following waveguide transmission is providing a wide variety of functional Demonstration Experiment , also related to the applications of spectrum, horn antenna transmitting and receiving. The modular structure practical experiments is in a very simple and flexible installation component, which can be incorporated in an equipment box, easy to carry and transport.

PARTS & SPECIFICATIONS OF BIT3000 KIT
Model.No Name Technical performance Remarks

Model.No	Name	Technical performance	Remarks
1125	Gunn Oscillator	9-11GHz , P≥15Mw	standard
8222	Slide Crew Turner	Coefficient of adjustable voltage standing wave : 20 ~ 1.06	standard
3632	Slotted Line	Range Of Working Frequency : 8.2ghz ~ 12.4ghz ; Coefficient Of VSWR : ≤1.05 ; Depth Of Probe Into Waveguide : 3mm ; Moving Distance Of Probe : 40mm	standard
8353	Fixed Attenuator	20dB±5dB S < 1.15	standard
8252	Terminator	Coefficient of standing wave : ≤1.05	standard
8392	Wave to Coax adapter	Coefficient of standing wave : ≤1.50	standard
8321	Wave Guide (2 EA)	10.16×22.86×100mmBJ100	Standard
8301	Metal Stand(8 pcs)	fixed height:63mm	Standard
8201	Power Supply	12V	Standard
8311	Hybird Tee	S < 2	Standard
8261	Directional Coupler	Center frequency coupling : 10dB±2dB ; directional : ≥20dB ; VSWR coefficient : main、auxiliary line < 1.25	Standard
8912	Horn antenna(2 EA)	Gain : >14dB;VSWR : <1.30	Standard
8202	1KHz Square generator	1K±5%	standard
	coaxial cable withconnector (2 EA)		
	Bolt (50 pairs)		
3892	Selected frequency amplifier	Working Frequency : 1000Hz , Tuning Range More Than40hz; Passed Bandwidth:16Hz ~ 40Hz Continuously Tunable ; Sensitivity; The Impedance200kω; Full Deflection Of The Meter , 16Hz Passed Bandwidth, More Than 0.5mv ; Calibration On The Meter : Calibration 0 ~ 1000mv ; Decibel 0 ~ 10db ; VSWR1 ~ 4 , 3 ~ 10Nonlinear Error : Less Than 5% Of Full Range ; Amplifier Range : 0 ~ 60db , Pre10db±0.5db Step-Step 0 ~ 5db±0.2db 0 ~ 5db Continuously Tunable ; Input Impedance : 200kω	Optional accessories
2421	Power Meter	frequency range : 50MHz ~ 12.4GHz , Power measurement range : 0.1uW ~ 100mW , Measurement Accuracy : working erro±8% , VSWR : S≤1.4,Power base : 50MHz , 1.00mW±1.5%	Optional accessories
8322	waveguide crankle section	90° , VSWR≤1.15	Optional accessories



Side Crew Turner



Frequency Meter



Thybird Tee



Directional Coupler

CARRYING CASE

