

# Waveguide Training System

## AT3000

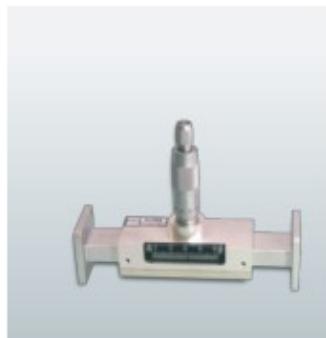


**8GHz ~ 12.4GHz**

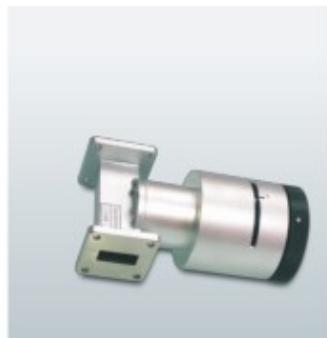
3cm waveguide Training System to provide users an in-depth training on microwave waveguide device. This training kit can be used in understanding the transmission characteristics of the frequency and allround understanding of the way in the use of universal frequency bandwidth in the X series. This experimental demonstration of frequency can be done in most simple method using this kit. This microwave radio communication network is very important in our daily life.

### FEATURES

- Gunn Oscillator based system
- Directional Coupler & Horn Antenna
- Frequency: 8GHz ~ 12.4GHz (X-Band)
- Microwave output: 15mV



Slide Crew Turner



Frequency Meter



Thybird Tee



Directional Coupler

# Waveguide Training System

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### EXPERIMENT CONFIGURATIONS

Model No.	Item	Project 1 Simple Type	Project 2	Project 3	Project 4 General Type	Project 5	Project 6	Project 7 Advanced
		AT3001	AT3002	AT3003	AT3004	AT3005	AT3006	AT3007
AT1123	Standard Signal Generator				✓	✓	✓	✓
AT1125	Gunn Oscillator		✓	✓				
AT8341	PIN Modulator	✓	✓	✓	✓	✓	✓	
AT8912	Horn Antenna			✓	✓	✓	✓	
AT8392	Coaxial Waveguide Converter			✓	✓	✓	✓	
AT8291	Slide Crew Tuner			✓	✓	✓	✓	
AT3632	Testing Line	✓	✓	✓	✓	✓	✓	
AT8232	Detector				✓	✓	✓	✓
AT8272	Frequency Counter		✓	✓	✓	✓	✓	
AT8352	Changeable Attenuator	✓	✓	✓	✓	✓	✓	
AT8353	Fixed Attenuator(6dB, 20dB)		✓ (1 PC)		✓	✓	✓	
AT8252	Terminal Load	✓	✓	✓	✓	✓	✓	
AT8261	Directional Coupler				✓	✓	✓	✓
AT8311	Hybrid Tee			✓	✓	✓	✓	
AT8321	Straight Waveguide				✓	✓	✓	
AT8381	Short Circuit Board	✓	✓	✓	✓	✓	✓	
Bracket, Bolt	750	✓ (4 brackets)	✓ (4 brackets)	✓ (4 brackets)	✓	✓	✓	
N-Type	Coaxial Cable				✓	✓	✓	
AT8201	Power Supply		✓	✓				
AT8202	Function Generator		✓	✓				
AT1124	Simple Signal Generator	✓	✓					
AT437C	Power Meter				✓	✓	✓	✓
AT3892	Frequency Selective Amplifier				✓	✓	✓	✓
AT3893	SWR Indicator	✓	✓					
F9	Frequency Expander				✓	✓	✓	
ADS1102CA	OSCilloscope(100MHz)				✓	✓	✓	
AT6300D	Spectrum Analyzer(3GHz)							
AT5010+	Spectrum Analyzer(1GHz)				✓			
AT6010+	Spectrum Analyzer(1GHz)					✓		
SWR Meter	50	✓						
AT8301	Reflection Board	✓	✓	✓	✓	✓	✓	✓
	Package Aand User Manual	✓	✓	✓	✓	✓	✓	✓

Experiments	
Project 1 Simple Type	This configuration can conduct the Experiments 3,6
Project 2	This configuration can conduct the Experiments 3,6 and 9
Project 3	This configuration can conduct the Experiments 1,2,3,6 and 9
Project 4 General Type	This configuration can conduct the Experiments 1,2,3,4,5,6,7,8,9,10
Project 5	This configuration can conduct the Experiments 1,2,3,4,5,6,7,8,9,10 and time-domain and frequencydomain experiments 11,12
Project 6	This configuration can conduct the Experiments 1,2,3,4,5,6,7,8,9,10 and time-domain and frequencydomain experiments 11,12
Project 7 Advanced	Experiment 1,2,3,4,5,6,7,8,9,10 Adding timedomain and frequencydomain experiments 11,12 All the experiments are Included and the equipments are the best the most complete configuration.

AT3002 Waveguide Experiments	
Experiment 1:	Gunn Oscillator
Experiment 2:	Modulator and Detector
Experiment 3:	Transmission Type, Wavelength and Phase Velocity Within the Waveguide
Experiment 4:	Q Value and Resonant Cavity Bandwidth
Experiment 5:	Power Measurement
Experiment 6:	VSWR Measurement
Experiment 7:	Impedance Measurement
Experiment 8:	Basic Characteristics of Directional Coupler
Experiment 9:	Attenuation Measurement
Experiment 10:	Waveguide Research of Hybrid Tee

Additional Experiments	
Experiment 11:	8.2-12.4GHz Time-domain Waveform Measurements
Experiment 12:	8.2-12.4GHz Frequency-domain Waveform Measurements



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