

# ANG 5000 SERIES AUTOMATED NOISE INSTRUMENTS



- \* Color LCD Screen
- \* Intuitive GUI Interface
- \* Flexible Architecture

## DESCRIPTION

The ANG 5000 Series offers the most flexible architecture available in an automated white Gaussian noise generator. The intuitive graphical interface, color LCD display and remote control interfaces (GPIB or RS/232) allow the user to easily set or program precise levels of noise. Adding options such as input signal combiner and signal/noise path filtering allows the ANG5000 to be configured to perform more advanced testing like signal to noise or carrier to noise ratios.

## SPECIFICATIONS

- † Operating Temp: 0 to +70°C
- † Supply Voltage: 90-240v, 50/60 Hz  
Auto Sensing
- † Temp Stability: 0.025 dB/°C
- † Output Impedance: 50 ohm
- † Crest Factor: 15 dB
- † Attenuation: 0 to 100 dB, in 1 dB steps  
(optional 0.1 dB steps)
- † Save/Recall Registers: 31
- † Dimensions: 12" x 19" x 5.25"
- † Weight: 25 lbs. maximum
- † CE Compliant to ISM 1-A

## FLEXIBLE ARCHITECTURE OPTIONS INCLUDE:

- † 0.1 dB Noise Path Attenuator
- † 75 ohm Impedance (on models 5107-5109)
- † Signal Input and Combiner for S+N or  $E_b/N_0$
- † Noise and Output Filters
- † Front or Rear panel output
- † Remote Control
- † Interfaces: GPIB and optional RS/232
- † Attenuator characterization

## ANG 5000 SERIES OUTPUT CHARACTERISTICS

MODEL	FREQUENCY	FLATNESS dB P-P	VSWR	RF OUTPUT (dBm/Hz)	Power (dBm)
ANG5107	100Hz-100MHz	2.0 dB	1.5:1	-70	+10
ANG5108	100Hz-300MHz	3.0 dB	1.5:1	-75	+10
ANG5109	100Hz-500MHz	4.0 dB	1.5:1	-77	+10
ANG5110	300MHz-1GHz	4.0 dB	1.5:1	-79	+10
ANG5111	1GHz-2GHz	4.0 dB	2.0:1	-80	+10
ANG5112	10MHz-2GHz	4.0 dB	2.0:1	-83	+10
ANG5200	100Hz-1GHz	4.0 dB	2.0:1	-80	+10
ANG5250	100Hz-1500MHz	5.0 dB	2.0:1	-82	+10
ANG5270	500MHz-8GHz	5.0 dB	2.0:1	-97	+2
ANG5280	2GHz-8GHz	4.0 dB	2.0:1	-112	-13
ANG5300	2GHz-18GHz	6.0 dB	2.5:1	-112	-10

## USER CONTROLS:

- Noise Power in D.U.T. Bandwidth
- Noise Power in Spectral Density (dBm/Hz)
- D.U.T. Bandwidth Entry
- Center Frequency Entry
- Noise Attenuation Control
- Noise On-Off, Increment, Decrement, Step Size Adjust

## APPLICATIONS:

The ANG 5000 Series is designed for benchtop and ATE applications:

- Satellite and earth terminal testing
- Wireless communications systems
- Cable TV distribution systems
- Data transmission modems
- Transmitters/receivers channel interference
- Radar testing
- Electronic Countermeasures
- Broadband jamming

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# ANG 5000 SERIES AUTOMATED NOISE INSTRUMENTS

## How To Order

**ANG5XXX - XX**

**Model:** \_\_\_\_\_  
(reference model chart)

**Connector Type:** \_\_\_\_\_

A= N (Female)  
B= BNC (Female)  
C= SMA (Female)

**Connector Location:** \_\_\_\_\_

D= Front  
E= Back

## Configuration Options

**ANG5XXXOPT - XXX**

**Model** \_\_\_\_\_

**Configuration options** \_\_\_\_\_

A01 = 0.1 dB Attenuation Step Size

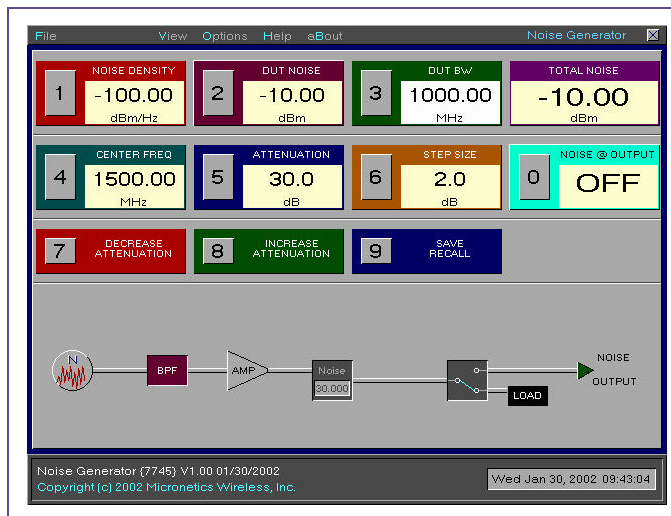
F01 = Customer Specified Band Pass Filter Output  
(specify NEBW)

C01 = Carrier Path and Carrier + Noise Combiner\*  
\*results in 4 dB loss of noise power and 4 dB signal path loss

T01 = Customer Specified Band Pass Filter Output  
(specify NEBW on Noise + Carrier)

R01 = 75 ohm Impedance\*\*  
\*\*only available on 5107-5108. 5109 models

B01 = RS/232 remote interface in addition to GPIB



Below is an example of an ANG5107 with 0.1dB attenuator and combiner options, the configuration includes front pannel BNC connectors. To obtain this configuration the order is placed as 3 line items.

Item #	Item	Qty
#1	ANG5107-BD	1
#2	ANG5107-A01	1
#3	ANG5107-C01	1

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