



Data Sheet

# ***NC6000A/NC8000A Series AWGN Noise Generator***



***Count on the noise leader***

# NC6000A/NC8000A Series AWGN Noise Generator

The **NC6000A** and **NC8000A** Series instruments are designed for general-purpose noise applications on the bench, or in a rack test station. The manual controls make it simple to operate and reduce test set up time. The standard output power NC6000A is typically used for BER, and SNR applications, while the high power NC8000A is a good candidate for signal jamming. Each instrument contains a precision noise source that delivers repeatable, symmetrical white Gaussian noise and is integrated with an amplifier, attenuator, and power supply. Noisecom will modify base units for specific customer needs. For pricing and availability, consult the factory.

## General Specifications

- Output White Gaussian noise
- Attenuator range 0 to 10 dB in 1 dB steps
- Impedance 50 Ohms
- Typical VSWR 1.5:1
- Standard connector SMA female (K female for NC6226)
- Dimensions:  
(NC6000A) 8.5 in. wide x 5 in. high x 12.25 in. deep  
(NC8000A) 17 in. wide x 5.25 in. high x 13 in. deep
- Power requirements are 120 VAC, 60 Hz, at 500 mA for the NC6000A, 1500 mA for the NC8000A
- Operating temperature -10° to + 60°C



## Applications

- BER Testing
- Military Jamming
- "K" Band Capability
- CATV Testing
- Video Testing
- General Purpose



## Specifications

### NC6000A/NC8000A Series

NC6000A		Output Characteristics			
Model	Frequency Band	Power (dBm)	PSD dBm/Hz	Flatness (dB)	uV/root (Hz)
NC6101A	10 Hz-20 kHz	+13	-30	±0.5	7071
NC6103A	10 Hz-500 kHz	+13	-44	±0.5	1414
NC6105A	10 Hz-10 MHz	+13	-57	±0.75	316
NC6107A	100 Hz-100 MHz	+13	-67	±1.0	100
NC6108A	100 Hz-500 MHz	+10	-77	±1.5	31.6
NC6109A	100 Hz-1 GHz	+10	-80	±2.0	22.4
NC6110A	100 Hz-1.5 GHz	+10	-82	±2.0	18.2
NC6111A	1 GHz-2 GHz	+10	-80	±2.0	22.4
NC6112A	1 MHz-2 GHz	0	-93	±2.5	5.01
NC6113A	1 MHz-3 GHz	0	-95	±2.5	5.01
NC6114A	1 MHz-4 GHz	-3	-100	±2.5	2.24
NC6124A	2 GHz-4 GHz	-10	-103	±2.5	1.58
NC6126A	2 GHz-6 GHz	-15	-111	±2.5	0.63
NC6128A	10 MHz-10 GHz	-17	-117	±3.5	0.32
NC6218A	2 GHz-18 GHz	-20	-122	±3.0	0.18
NC6226A	2 GHz-26.5 GHz	-20	-124	±3.0	0.14

### NC8000A

Model	Frequency Band	Power (dBm)	PSD dBm/Hz	Flatness (dB)
NC8103A*	500 Hz-500 kHz	+30	-27	±2.0
NC8105A*	500 Hz-10 MHz	+30	-40	±2.0
NC8107A*	250 kHz-100 MHz	+30	-50	±2.0
NC8108A*	1 MHz-200 MHz	+30	-53	±2.0
NC8109A*	1 MHz-300 MHz	+30	-55	±2.0
NC8110A*	2 MHz-500 MHz	+30	-57	±2.0
NC8111A*	5 MHz-1 GHz	+30	-60	±2.5
NC8112A	1GHz -2 GHz	+30	-60	±2.5

\*High power units have a reduced crest factor.

## Options

Option Number	Description
NC6/NC8opt01	100 dB attenuator in 10 dB steps*
NC6/NC8opt02	110 dB attenuator in 1 dB steps (two attenuators)**
NC6/NC8opt03	Line power 230 VAC, 50 Hz
NC6/NC8opt04	Combiner for input signal (6 dB loss in noise and signal paths)
NC6opt06	19 in. Rack mount (NC6000 only) 17 in. wide by 3.5 in. high by 13 in. deep
NC6/NC8opt07	N female output connector
NC6/NC8opt08	BNC female output connector
NC6/NC8opt09	75-ohm output impedance (6 dB loss)
NC6/NC8opt10	Additional 1 dB attenuator in 0.1 dB steps***
NC6/NC8opt11	Custom frequency, power, or flatness requirement****

\*60 dB for NC6124A, NC6218A, and NC6226A

\*\*69 dB for NC6124A, NC6218A, NC6126A, and NC6226A

\*\*\*N/A for NC6226A

\*\*\*\*Consult factory for pricing and availability



NC6000 with a rack mount.



NC8000 Noise Generator.

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