

**BROADBAND**

**GENERAL**

**PURPOSE**

**NOISE**

**GENERATORS**



### General Specifications:

Output	White Gaussian noise
Attenuator	0 to 10 dB in 1 dB steps; other options available
Impedance	50 ohms (75 ohms optional)
Typical VSWR	1.5:1
Standard output connector	SMA female (K female for NC6240)
Standard:	(NC6000) 8.5 in. wide x 5 in. high x 12.25 in. deep (NC8000) 17 in. wide x 5.25 in. high x 13 in. deep
Power	120 VAC, 60 Hz
Operating temperature	-10° to +60°C
Specifications subject to change without notice.	

The *NC6000* and *NC8000 Series* noise generating instruments are designed for applications on the test bench, or in test stations in which an *NC6000* or *NC8000 Series* unit is incorporated with other equipment that provides a wide variety of functions.

Each instrument contains a Noise Com precision noise source that delivers repeatable, symmetrical white Gaussian noise. The noise source is integrated with an amplifier, 10 dB attenuator with 1 dB steps, and power supply. The instruments have a 50 ohm output impedance.

The *NC6000 Series* units measure 8.5 in. wide by 5 in. high by 12.25 in. deep.

The *NC8000 Series* units measure 17 in. wide by 5.25 in. high by 13 in. deep, and they come with brackets for 19 in. rack mounting. Power requirements are 120 VAC, 60 Hz, at 500 mA for the *NC6000*, and 1500 mA for the *NC8000*. Operating temperature range is from -10°C to +60°C. Standard output connector is SMA; others are available.

### Applications:

- CATV testing
- Development testing
- HDTV field testing
- General purpose

NC6000 SERIES					
MODEL	FREQUENCY RANGE	OUTPUT CHARACTERISTICS			
		POWER (dBm)	dBm/Hz	FLATNESS (dB)	$\mu V/\sqrt{Hz}$
NC6101	10 Hz - 20 kHz	+13	-30	$\pm 0.5$	7071
NC6103	10 Hz - 500 kHz	+13	-44	$\pm 0.5$	1414
NC6105	10 Hz - 10 MHz	+13	-57	$\pm 0.75$	316
NC6107	100 Hz - 100 MHz	+13	-67	$\pm 1.0$	100
NC6108	100 Hz - 500 MHz	+10	-77	$\pm 1.5$	31.6
NC6109	100 Hz - 1 GHz	+10	-80	$\pm 2.0$	22.4
NC6110	100 Hz - 1.5 GHz	+10	-82	$\pm 2.0$	18.2
NC6111	1 GHz - 2 GHz	+10	-80	$\pm 2.0$	22.4
NC6112	1 MHz - 2 GHz	0	-93	$\pm 2.0$	5.01
NC6124	2 GHz - 4 GHz	-10	-106	$\pm 2.0$	1.58
NC6126	2 GHz - 6 GHz	-15	-113	$\pm 2.0$	0.50
NC6218	2 GHz - 18 GHz	-20	-122	$\pm 3.0$	0.18

NC8000 SERIES, +30 dBm (1 WATT) OUTPUT			
MODEL	FREQUENCY RANGE	OUTPUT(dBm/Hz)	FLATNESS(dB)
NC8105	500 Hz - 10 MHz	-40	$\pm 2.0$
NC8107	250 kHz - 100 MHz	-50	$\pm 2.0$
NC8108	1 MHz - 200 MHz	-53	$\pm 2.0$
NC8109	1 MHz - 300 MHz	-55	$\pm 2.0$
NC8110	2 MHz - 500 MHz	-57	$\pm 2.0$
NC8111	5 MHz - 1 GHz	-60	$\pm 2.5$

OPTIONS		
Option Number		Description
NC6opt01	NC8opt01	100 dB attenuator in 10 dB steps instead of standard 10 dB attenuator in 1 dB steps*
NC6opt02	NC8opt02	110 dB attenuator in 1 dB steps (two attenuators)**
NC6opt03	NC8opt03	Line power 230 VAC, 50 Hz
NC6opt04	NC8opt04	Combiner for input signal (Loss of 6 dB in noise and signal paths)
NC6opt05	NC8opt05	N/A
NC6opt06	N/A	19 in. rack mountable unit, 17 in. wide by 3.5 in. high by 13 in. deep†
NC6opt07	NC8opt07	N female output connector
NC6opt08	NC8opt08	BNC female output connector
NC6opt09	NC8opt09	75 ohm output impedance (6 dB loss)
NC6opt10	NC8opt10	Additional 1 dB attenuator in 0.1 dB steps (was option #4 for the NC8000 Series) (N/A for NC6124, NC6218 and NC6240)

\*60 dB for NC6214 and NC6218

\*\*69 dB for NC6214 and NC6218

†NC8000 Series is rack mountable only with 5.25 inch height

To order call 201-261-8797