BROADBAND

GENERAL

PURPOSE

NOISE

GENERATORS

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.

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.

Power requirements are 120 VAC, 60 Hz, at

NOISE GENERATOR ATTENUATOR MODEL NO. NC 6109 100 Hz. 100 MHz. 10 MW NOISE COMPILE Paramilla N.3

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		SMA female	
connector		(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		-10° to +60°C	
temperatur	e		

Applications:

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



Specifications subject to change without notice.



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

NC8000 SERIES, +30 dBm (1 WATT) OUTPUT					
MODEL	FREQUENCY RANGE	OUTPUT(dBm/Hz)	FLATNESS(dB)		
NC8103	500 Hz - 500 kHz	-27	± 2.0		
NC8105	500 Hz - 10 MHz	-40	±2.0		
NC8107	250 kHz - 100 MHz	-50	±2.0		
NC8108	1 MHz - 200 MHz	-53	±2.0		
NC8109	1 MHz - 300 MHz	-55	±2.0		
NC8110	2 MHz - 500 MHz	-57	±2.0		
NC8111	5 MHz - 1 GHz	-60	±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