

NMA WiFi Noise Modules

0.5 GHz to 6 GHz



NMA WiFi Output Characteristics

MODEL*	FREQUENCY	NOISE OUTPUT LEVEL		
		FLATNESS	dBm/Hz Min.	dBm/Hz Max.
NMA-WiFi	2.4 GHz-2.5GHz	0.8 dB P-P	-90.0	-84
NMA-WiFi5	5.1 GHz-5.4GHz	0.8 dB P-P	-90.0	-84
NMA-ISM	0.5 GHz-6.0GHz	4.0 dB P-P	-100	-92

Ordering: -TTL indicates TTL control

Example: NMA-WiFi5-TTL

Specification definitions:

Noise Spectral Density, No is the noise power normalized to a 1Hz bandwidth expressed in units of dBm/Hz

Flatness is specified over the given frequency range. It is the decibel difference of the high peak to the low peak.

Min Output Level is the threshold where the noise spectral density output must not fall below anywhere within the frequency range.

Max Output Level is the threshold where the noise spectral density output must not fall below anywhere within the frequency range

Calibration: The WiFi and WiFi5 modules are calibrated as noise spectral density output at spot frequencies corresponding to the center frequency of each 802.11a and 802.11b frequency. For Bluetooth or other ISM devices, specify the spot frequency points you desire. Data is supplied as a tabular print-out and is available in space delimited text file format.

DESCRIPTION

Micronetics NMA-WiFi series products are specifically designed to perform interference tests for 802.11a, 802.11b and ISM products in general. The Gaussian output can simulate noise from other ISM devices sharing the same spectrum as well as thermal noise. By setting up an exact signal to interference ratio, one can measure bit error rate (BER) as well as test how well the system operates under real world conditions in general.

The devices consist of a stable noise source and multistage amplifier for high output Gaussian noise output. The units have a built-in voltage regulator so output is stable even if your supply voltage is not. They can be ordered with optional TTL control to switch the noise off or on from microprocessor control. Lastly, the units are calibrated for noise spectral density output centered at each channel so you know precisely your interference signal level.

SPECIFICATIONS

- Operating Temperature:
 - 55 to +95°C
- Storage Temperature:
 - 65 to +125°C
- Supply Voltage:
 - +15 VDC
- Temperature Stability:
 - .025 dB/°C
- Output Impedance:
 - 50 ohm
- Peak Factor: 5:1
- VSWR: 1.5:1 max.
- Calibration data in dBm/Hz

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