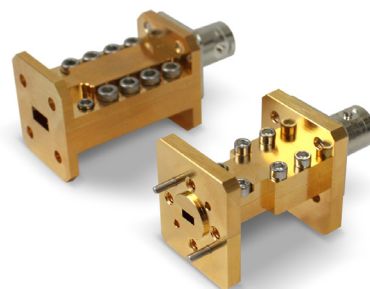


# NC5000A Series

## 18 GHz to 110 GHz



### Precision Calibrated Millimeter-Wave Wave Guide AWGN Noise Sources

The NC5000A Series AWGN noise sources feature outstanding stability, switching speed, and ripple-free response over standard waveguide bands. The high stability of the NC5000A Series allows these units to be used in place of cumbersome gas tube noise sources.

Ripple in the output of noise sources has a direct effect on measurement accuracy, so Noisecom has tailored the response of the NC5000 Series so that ripple is minimized throughout the specified frequency range.

The standard input bias connector is BNC female.

### Applications

- Noise figure measurement
- Radiometers
- 60 GHz WiGig
- Built-in test equipment (BITE)
- Military applications
- Small Cell Wireless Backhaul
- Automotive Radar
- 802.11ad, 60GHz Wi-Fi
- Wireless HD

### Specifications

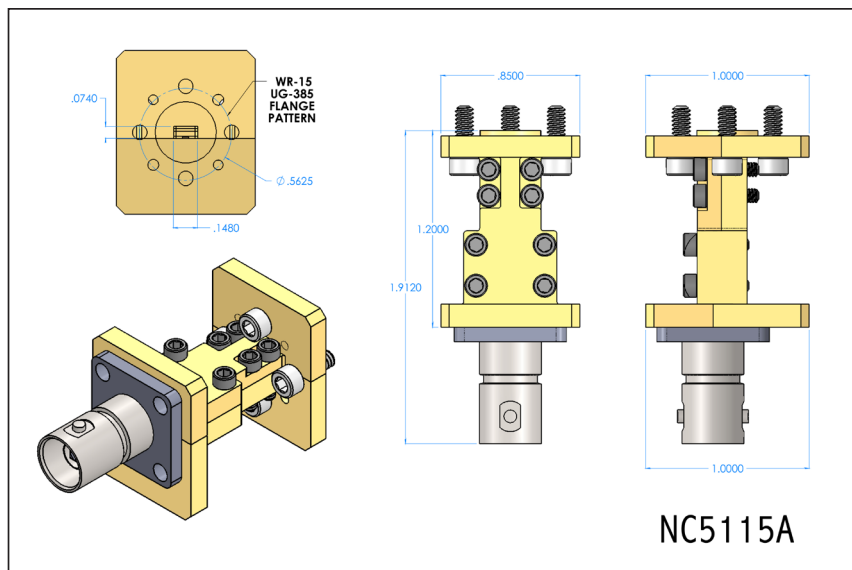
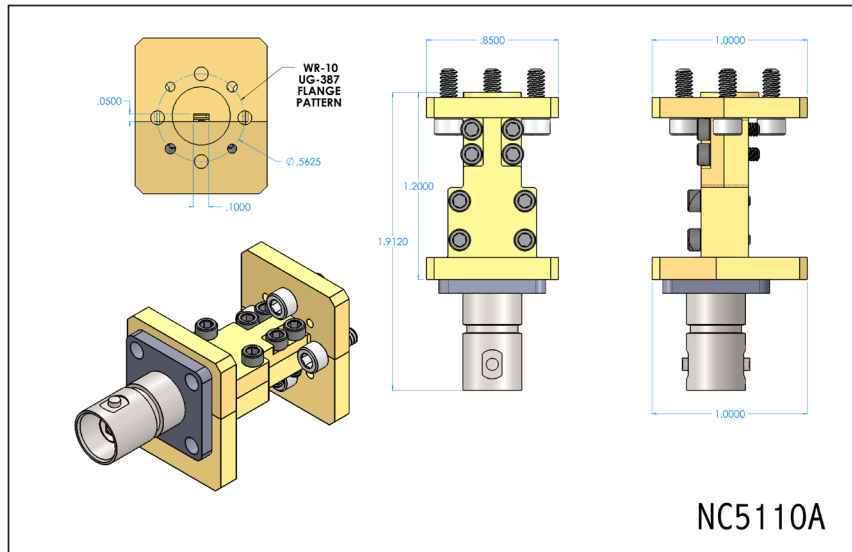
Noise output rise and fall times	Less than 1 $\mu$ s
Noise output variation with temperature	Less than 0.01 dB/ $^{\circ}$ C
Noise output variation with voltage	Less than 0.1 dB/1 % $\Delta$ V
Operating temperature	0 to +85 $^{\circ}$ C
Input power	+28 VDC at 30 mA max

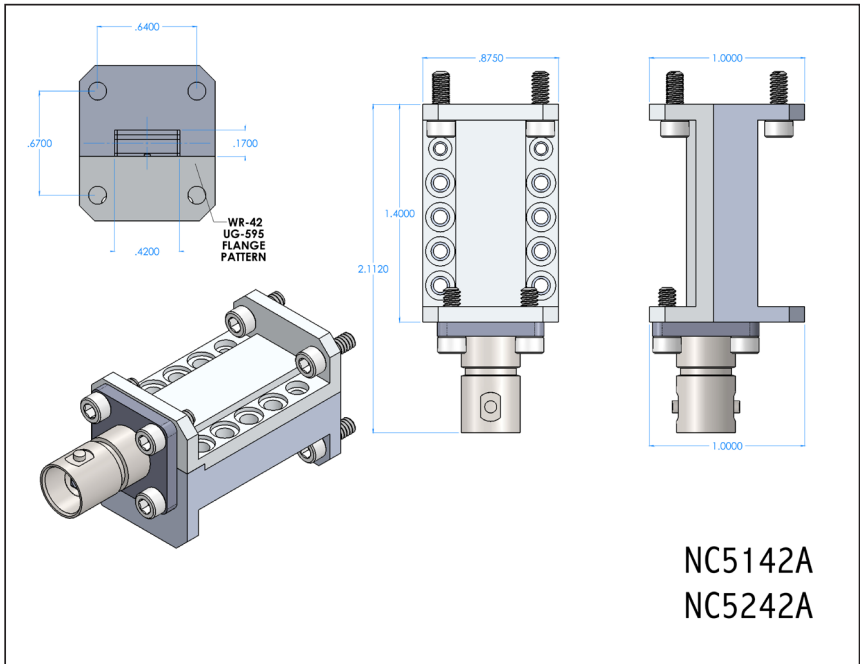
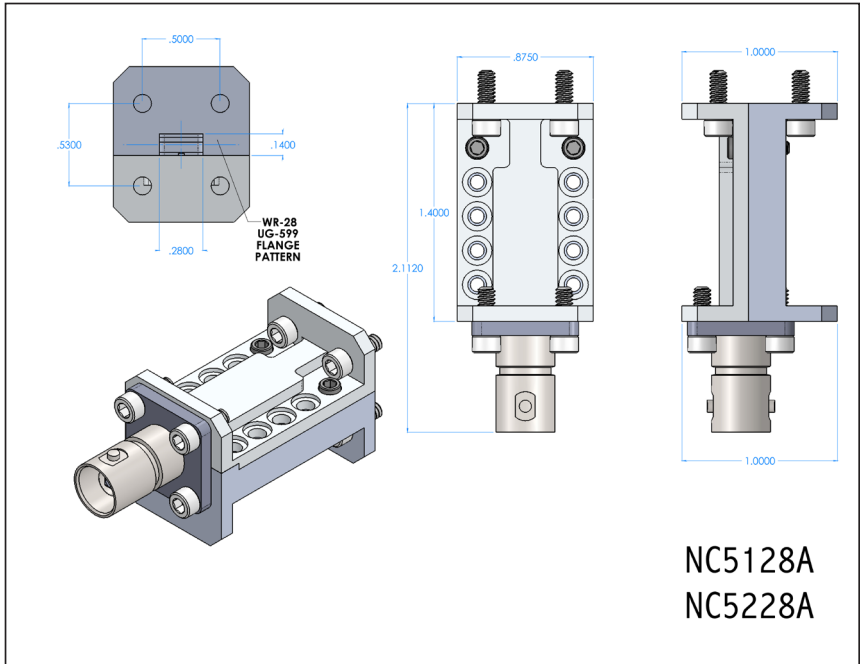
### Options

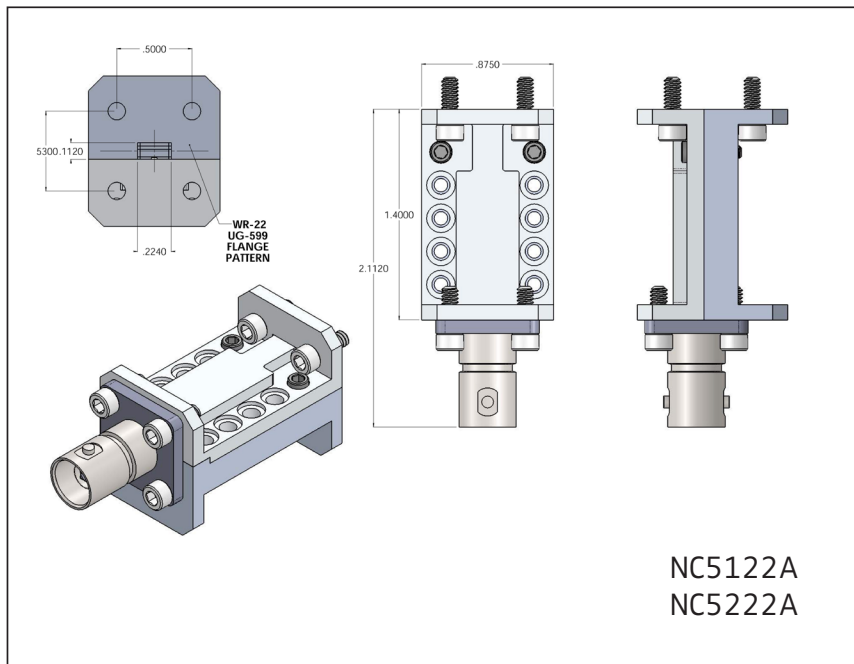
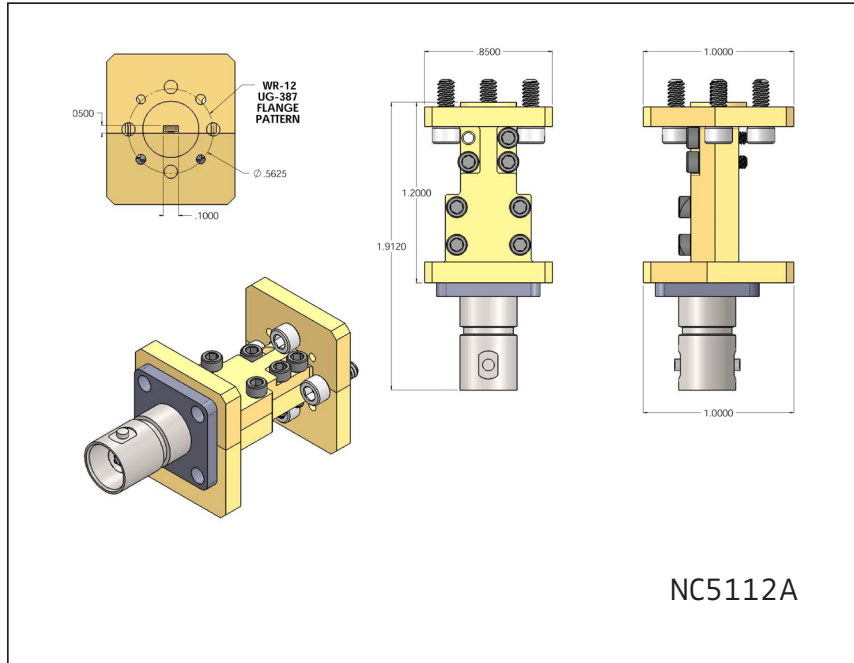
NC5opt01	+15 VDC
NC5opt04	+28 VDC with regulation Stabilized noise output for $\pm$ 2V variation
NC5opt05	Output isolator This option is standard on NC5115A, NC5112A, NC5110A

Model	Frequency Range (GHz)	Noise Output		Typical VSWR	Mating Flange	Calibration Frequencies	Waveguide	I (max) (mA)
		ENR (dB)	Flatness (dB)					
NC5142A	18 - 26.5	15.5	±1.5	1.3:1*	UG595/U	1 GHz steps	WR42	30
NC5242A	18 - 26.5	25.0	±1.0	1.3:1*	UG595/U	1 GHz steps	WR42	30
NC5128A	26.5 - 40	15.5	±1.5	1.3:1*	UG599/U	1 GHz steps	WR28	30
NC5228A	26.5 - 40	23.0	±2.5	1.3:1*	UG599/U	1 GHz steps	WR28	30
NC5122A	33 - 50	15.5	±1.5	1.3:1*	UG383/U	1 GHz steps	WR22	30
NC5115A	50 - 75	15.5 TYP	±3.0	1.6:1*	UG385/U	1 GHz steps	WR15	30
NC5112A	60 - 90	15 TYP	±4.0	1.6:1	UG387/U	1 GHz steps	WR12	30
NC5110A	75 - 110	13 TYP	±5.0	1.6:1	UG387/U	1 GHz steps	WR10	30

\*Maximum VSWR with isolator - Option 5







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