

Full Band Noise Figure and Gain Test Extenders

FEATURES:

- ❖ Full band operations
- ❖ Noise source included

APPLICATIONS:

- ❖ mmW amplifier testing
- ❖ mmW receiver testing
- ❖ Wafer probe station
- ❖ Test labs



CNF Series

DESCRIPTION:

CNF series full band noise figure and gain test extenders are offered to extend the noise and gain measurement capacity to the frequency range of 26.5 to 140GHz in seven waveguide bands. These extenders are designed to interface with industry standard noise/gain test systems, such as Agilent 8970A/B, N8973A and Maury MT 2075B, or any noise/gain analyzers with an input frequency in the range of 10 MHz to 1.6GHz capacity.

The noise figure and gain test extender includes a high performance solid-state noise source and a full waveguide down converter in which includes Faraday isolator, full band mixer, frequency multiplier and IF amplifier. A frequency source with output signal in the frequency range of 10 to 20 GHz and power level around 10dBm is required as local oscillator for the down converter input. The noise source is powered on and off by the noise figure meter automatically.

SPECIFICATIONS:

Waveguide Band	Ka	Q	U	V	E	W	F
Model#	CNF28	CNF22	CNF19	CNF15	CNF12	CNF10	CNF08
Waveguide Size	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10	WR-08
RF Frequency Range (GHz)	26.5 to 40	33 to 50	40 to 60	50 to 75	60 to 90	75 to 110	90 to 140
Noise Source: ENR (dB)	15.0	14.0	13.0	13.0	12.5	12.5	12.0
Noise Source: Bias (Vdc)	+28						
IF Frequency Range (MHz)	10 to 1,600						
LO Frequency Range (GHz)	13.25 to 20.0	11.0 to 16.67	13.33 to 20.0	12.5 to 18.75	10.0 to 15.0	12.5 to 18.33	10.0 to 15.56
LO Power (dBm), Typical	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Noise Figure (dB), Max.	7.5	8.0	9.0	9.5	10.5	11.0	13.0
Conversion Gain (dB), Min.	20.0	20.0	20.0	20.0	20.0	20.0	20.0
RF Connector	UG599/U	UG383/U	UG383/U-M	UG385/U	UG387/U	UG387/U-M	UG387/U-M
IF and LO Connectors	SMA(F)	SMA(F)	SMA(F)	SMA(F)	SMA(F)	SMA(F)	SMA(F)
Extender Bias (Vdc/mA)	+12/200	+12/250	+12/250	+12/300	+12/450	+12/450	+12/450

CONTACT THE FACTORY FOR SPECIAL REQUIREMENTS

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