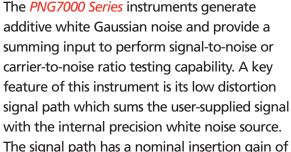
Телефон: +7 (499) 685-7744 used@used4test.ru www.used4test.ru

PRECISION

NOISE

GENERATORS

(AWGN)



0 dB, with very low amplitude and phase ripple. The noise source provides an exceptionally high crest factor of 18 dB for accurate bit error rate testing, even

with large carrier-to-noise (CNR) or bit energyto-noise density (E_bN_o) ratios. With option 7 (DC instead of AC coupled) signal path, the PNG7000 can add noise directly to a digital TTL, ECL, or similar signal that operates in a 50-ohm system.

The standard *PNG7000* is a broadband device. For applications in which the frequency range is limited, the unit can be configured with up to five band-limited noise sources, each optimized for flatness over the specified frequency band.

The *PNG7000 Series* is microprocessor-controlled and continually provides information about operation of the instrument on a 4 x 20 character LCD display. The instruments allow control of the noise level, noise on/off, signal on/off, and noise source selection in three ways: at the front panel keypad, remotely via IEEE-488 bus, or automatically under program control.

The *PNG7000* instruments can be integrated into a test station under software control (Lab Windows drivers are available from National Instruments) and with the aid of a precision power meter, carrier-to-noise ratios can be set.



General Specifications:

Output	White Gaussian noise
Crest factor	18 dB minimum
Output noise power	+3 dBm
Noise attenuator	0 to 63 dB in
range	0.25 dB steps
Noise attenuator	±0.2 dB or 0.5%
accuracy	at 1 - 500 MHz
	±0.2 dB or 1%
	at 0.5 - 1.0 GHz
	±0.3 dB or 2%
	at 1 - 2 GHz
Signal path gain	0 ±1 dB
Group delay variation	±0.2 ns/40 MHz
Standard connectors	BNC female
Dimensions	17 in. wide x 5.25 in.
	high x 12.5 in. deep
Mounting	Front panel handles
	and fold-down feet
	for bench mounting.
C 100 100 100 100 100 100 100 100 100 10	Brackets included for
	19 in. rack mounting
Power	115 VAC, 60 Hz (230
	VAC, 50 Hz optional)
Operating	-10°C to +60°C
temperature	

Specifications subject to change without notice.



Once a CNR calibration has been performed, the ratio can be changed using the internal precision attenuator to vary the noise power without degrading accuracy. The output noise power level is factory calibrated at a 0 dB attenuator setting and is displayed in dBm/Hz.

Every front panel operation except instrument on/off is programmable, and the user can create up to nine test routines that can run automatically under program control. These routines can include delay times and loops, and can be executed manually or via bus control. The routines are easily written using the program key, and information on the display guides the user through the next steps.

Applications:

- C/N Ratio Testing
- E_b/N_o Testing
- AWGN
- CCITT G.95
- SONET
- Data regenerators
- Multiplexers
- Hard disk drives

PNG7000 SERIES					
MODEL	FREQUENCY RANGE	POWER (dBm)		CHARACTEI dBm/Hz	RISTICS FLATNESS(dB)
PNG7105	1 MHz - 10 MHz	+3	0.316	-67	±0.25
PNG7107	10 MHz - 100 MH	Hz +3	0.316	-77	±0.25 / 40 MHz
PNG7108	10 MHz - 500 MH	Hz +3	0.316	-84	±0.25 / 40 MHz
PNG7109	10 MHz - 1 GHz	+3	0.316	-87	±0.25 / 40 MHz
PNG7110	10 MHz - 1.5 GH:	z +3	0.316	-89	±0.25 / 40 MHz
PNG7111	1 GHz - 2 GHz	+3	0.316	-87	±0.25 / 40 MHz
PNG7112	10 MHz - 2 GHz	+3	0.316	-87	±0.25 / 40 MHz

OPTIONS			
Option Number	Description		
PNGopt01	SMA female input and output		
PNGopt02	75 ohms input and output impedance		
PNGopt03	230 VAC, 50 Hz		
PNGopt04	Switch including up to 5 noise sources		
PNGopt05	RS232 in addition to standard IEEE-488 interface		
PNGopt06	127 dB signal attenuator in 1 dB steps		
PNGopt07	DC coupled signal path (6 dB RF Loss)		



Lab Windows Drivers available from National Instruments

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