

NPR Testing For HFC Active Components

The NPRT 2200 comes in a compact two-rack unit enclosure that is well suited for laboratory and factory ATE environments.

The NPRT 2200's low cost and unsurpassed accuracy provide an unprecedented value.

Applications

- Quantify intermodulation distortion
- Determine dynamic range
- Amplifiers
- · Optical links

Benefits

- Easy to use
- Fast
- Accurate and repeatable
- High value / low cost

NPRT 2200

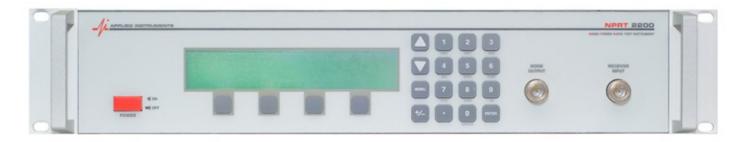
Return Path Noise Power Ratio Test Set

The NPRT 2200 measures the NPR of a device across a range of power levels. This test quantifies intermodulation distortion and determines the dynamic range of optical transmitters, amplifiers, and other active HFC network devices.

The included PC software uses predefined test setups to run a "Power Sweep" series of NPR measurements and graph the results. The measurements are compared to a threshold value to determine the acceptable operating power or dynamic range of the device. Results may be stored on the PC for further analysis and the graphs may be printed.

The NPRT 2200 inserts calibrated levels of white Gaussian noise (WGN) through a Device Under Test (DUT) then measures the noise level at a frequency where a notch filter is located.

The NPR is the ratio of the output power without the notch compared to the power with the notch filter. A graph of NPR versus input power illustrates the linear dynamic range and inter-modulation distortion characteristics of the DUT.



NPRT 2200

Return Path Noise Power Ratio Test Set

FEATURES

- Complete unit, source and receiver
- Controlled from front panel or PC
- "Power Sweep" graph printable from PC
- Compact two rack unit height enclosure
- Ideal for laboratory or factory ATE

SOURCE SPECIFICATIONS

Total Power	50 to +10 dBm
	(-1.25 to +58.75 dBmV)
Accuracy	+/- 0.3 dB
Resolution	0.05 dB
Return Loss	> 12 dB
Impedance	75 Ohm

RECEIVER SPECIFICATIONS

Input Power	70 to +10 dBm
·	(-21.25 to +58.75 dBmV)
Accuracy	+/- 0.3 dB
Return Loss	> 20 dB
Impedance	75 Ohm

GENERAL SPECIFICATIONS

Dimensions	19"W x 3.5"H x 19"D	
	(48.3 x 8.9 x 48.3 cm)	
Power	120/230 VAC 60/50 Hz	
Computer Interface	USB & RS-232	
Warranty	12 month limited	
Specifications subject to change without notice.		

STANDARD ACCESSORIES

- AC Line Cord
- PC data transfer cable
- Operation Manual

CONFIGURATIONS

Supports up to 4 frequency ranges (5 to 300 MHz) and up to 4 notch filters (up to 150 MHz). Ranges and notch filters are separately selectable for a total of 16 possible combinations.

Frequency Ranges	Notch Filters
5 to 42 MHz	10.7 MHz
5 to 50 MHz	21.4 MHz
5 to 65 MHz	27.5 MHz
5 to 75 MHz	30.5 MHz
5 to 85 MHz	35.0 MHz
5 to 100 MHz	41.0 MHz
5 to 120 MHz	45.0 MHz
5 to 186 MHz	48.0 MHz
5 to 204 MHz	50.0 MHz
5 to 234 MHz	60.0 MHz
5 to 300 MHz	75.0 MHz
32 to 65 MHz	80.0 MHz
	100.0 MHz
	117.0 MHz
	150.0 MHz
	160.0 MHz

*Other custom configurations are available upon request.

Noise Power Ratio Power Sweep Graph Noise Power Ratio Power Sweep Graph

Manufactured by:



Applied Instruments, Inc. 5230 Elmwood Avenue Indianapolis, Indiana 46203 USA Tel: (317) 782-4331 Fax: (317) 786-9665 Toll Free in USA: 1-800-244-2976

http://www.appliedin.com

Sales Representative: