

## 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.



***"Reliability through Simplicity"***

# 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.

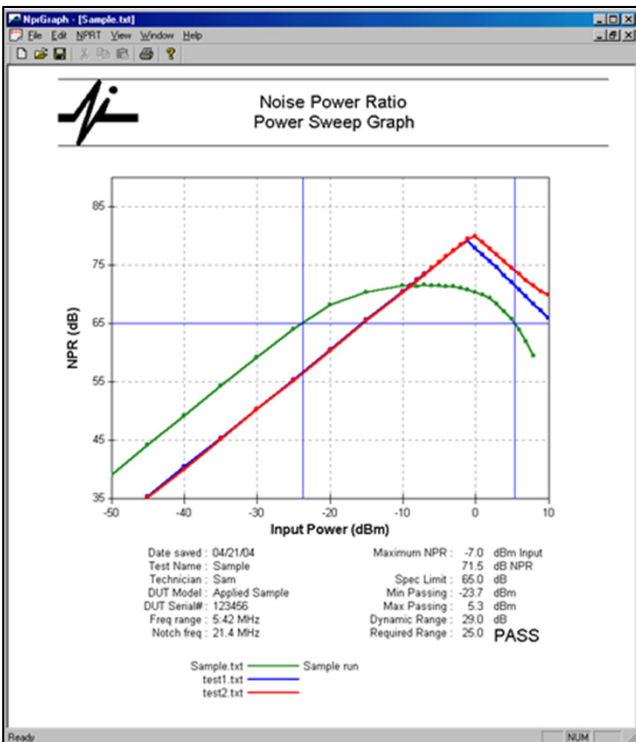
### Frequency Ranges

5 to 42 MHz  
5 to 50 MHz  
5 to 65 MHz  
5 to 75 MHz  
5 to 85 MHz  
5 to 100 MHz  
5 to 120 MHz  
5 to 186 MHz  
5 to 204 MHz  
5 to 234 MHz  
5 to 300 MHz  
32 to 65 MHz

### Notch Filters

10.7 MHz  
21.4 MHz  
27.5 MHz  
30.5 MHz  
35.0 MHz  
41.0 MHz  
45.0 MHz  
48.0 MHz  
50.0 MHz  
60.0 MHz  
75.0 MHz  
80.0 MHz  
100.0 MHz  
117.0 MHz  
150.0 MHz

*\*Other custom configurations are available upon request.*



## 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: