

Rohde & Schwarz R&S®NRP-Z Power Sensors

R&S®Smart Sensor Technology for Any Type of Signal

The smallest and lightest microwave measuring instruments available



Reasons to buy the R&S®NRP-Z Power Sensors

- ▶ Intelligent standalone instruments that don't require a base unit
- ▶ Connect sensors to an R&S meter, PC or other R&S instrument
- ▶ We offer "universal" sensors with a high dynamic range of 90 dB
- ▶ Wide dynamic range for CW and broadband signals
- ▶ High accuracy and measurement speed
- ▶ Two year calibration cycle for sensors (and base unit)
- ▶ Calibration data pre-stored in sensor for quick plug 'n play use
- ▶ Simultaneous operation and display of 4 sensors on base unit

THE R&S®NRP-Z POWER SENSOR IS THE RIGHT TOOL FOR A WIDE RANGE OF APPLICATIONS

APPLICATION	HOW THE R&S®NRP-Z MEETS YOUR NEED
<i>Multislot Measurements</i>	<i>The R&S®NRP-Z sensors make measurements with complex time slot structures such as GSM and EDGE signals</i>
<i>ATE Applications</i>	<i>Sensors can be connected directly to a laptop or desktop computer by means of a USB adapter, minimizing setup time and costs</i>
<i>Broadband Measurements</i>	<i>A wide dynamic range of 90 dB and the ability to measure signals independent of bandwidth and modulation such as WiMAX signals</i>
<i>Production Testing</i>	<i>High measurement speed with up to 1500 measurements per second in buffered mode</i>
<i>Field Applications</i>	<i>Optional battery for the base unit and temperature range of 0 to 50 degrees Celcius eliminates any restrictions for field use</i>
<i>Design of Circuits</i>	<i>Excellent linearity with an uncertainty of 1.5% minimizes measurement uncertainty</i>

What makes the R&S NRP-Z a great value?

The NRP-Z Power Sensor is an intelligent measuring instrument that does not require a power meter base unit, simply connect to a PC via USB and measure. A two year calibration cycle saves production downtime and eliminates the cost of a yearly calibration.

One versatile NRP-Z Power Sensor can make measurements that would require multiple sensor heads from other manufacturers.



The Power Viewer turns any PC into a power meter

Key Specifications at a Glance

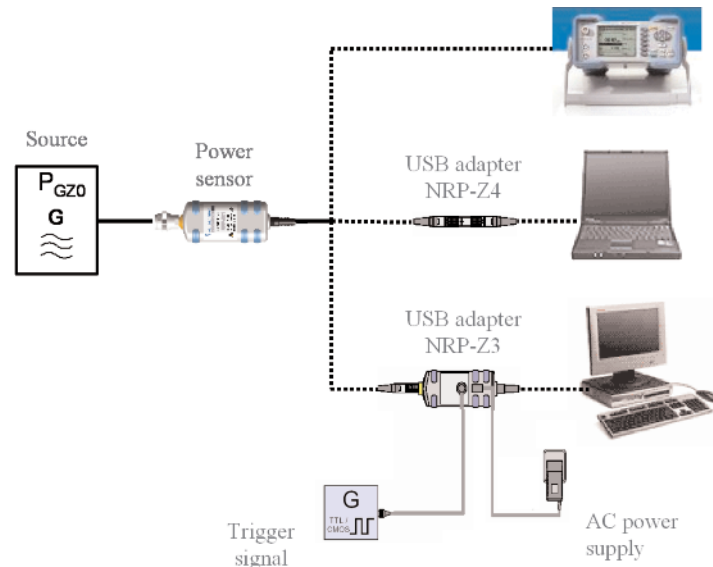
Specifications	R&S®NRP Power Meter
Sensor Type	R&S®NRP-Z Series
Measurement Channels	1, 2 or 4
Single-channel Display Absolute Relative	As specified by sensor In W, dB and dBm In dB, as change in percent or as quotient
Multi-channel Display Difference Ratio Relative Ratio	Simultaneous measurement of up to 4 channels; ratio, relative ratio, or difference of results of 2 channels can be displayed (for all factions except Scope) In W In dB, as a change in percent, as quotient or as a matching parameter: SWR, return loss or reflection coefficient In dB, as a change in percent or as a quotient
Display Type	LC graphics screen 1/4 VGA (320x240) pixel, monochrome, transfective
Representation	Digital, digital and analog
Manual Operation	Windows-oriented menus with hotkeys for the most important functions
FOR TECHNICAL INFORMATION OF SENSORS GO TO OUR WEBSITE: http://www.rohde-schwarz.com/product/nrp.html	

Extras included with the R&S®NRP-Z

- ▶ Free firmware updates available on our website <http://www.rohde-schwarz.com>
- ▶ Standard 1 year warranty and 2 year calibration included with purchase

Service Options

3 and 5 year calibration and repair service options are available



Reading Power with the NRP-Z Sensors

Ordering Information

Product	Type	Order No.
Sensor Extension Cable (5 Meters)	R&S®NRP-Z2	1146.6750.05
Sensor Extension Cable (10 Meters)	R&S®NRP-Z2	1146.6750.10
USB Adapter (Active)	R&S®NRP-Z3	1146.7005.02
USB Adapter (Passive)	R&S®NRP-Z4	1146.8001.02
Average Power Sensor: 10 MHz to 8 GHz Measurement Range 200 pW to 200 mW	R&S®NRP-Z11	1138.3004.02
Average Power Sensor: 10 MHz to 18 GHz Measurement Range 200 pW to 200 mW	R&S®NRP-Z21	1137.6000.02
Average Power Sensor: 10 MHz to 18 GHz Higher Power Measurement Range 2 nW to 2 W	R&S®NRP-Z22	1137.7506.02
Average Power Sensor: 10 MHz to 18 GHz Higher Power Measurement Range 20 nW to 15 W	R&S®NRP-Z23	1137.8002.02
Average Power Sensor: 10 MHz to 18 GHz Higher Power Measurement Range 60 nW to 30 W	R&S®NRP-Z24	1137.8502.02
Thermal Power Sensor: DC to 18 GHz Measurement Range 1 μW to 100 mW	R&S®NRP-Z51	1138.0005.02
Thermal Power Sensor: DC to 40 GHz Measurement Range 1 μW to 100 mW	R&S®NRP-Z55	1138.2008.02
Wideband Power Sensor: 50 MHz to 18 GHz Measurement Range 1 nW to 100 mW	R&S®NRP-Z81	1137.9009.02
Average Power Sensor for Lower Frequencies: 9 kHz to 6 GHz, 200 pW to 200 mW	R&S®NRP-Z91	1168.8004.02
Power Meter Base Unit	R&S®NRP	1143.8500.02
Sensor Check Source	R&S®NRP-B1	1146.9008.02
Second Sensor Input (B) (factory-fitted only)	R&S®NRP-B2	1146.8801.02
Battery Supply with Built-in Charger and NiMH Battery	R&S®NRP-B3	1146.8501.02
3rd and 4th Sensor Inputs (C & D) *	R&S®NRP-B5	1146.9608.02
Rear Panel Sensor Inputs (A & B) **	R&S®NRP-B6	1146.9908.02

* Requires option R&S®NRP-B2

**Not in conjunction with R&S®NRP-B5

For more information go to our website:

<http://www.rohde-schwarz.com/product/nrp.html>

