

SELECT YOUR NEXT POWER SENSOR/METER

Model	Level range	Frequency range	
Frequency selective power sensor			
R&S®NRQ6	-130 dBm to +20 dBm	50 MHz to 6 GHz	
Power meter			
R&S®NRX	–70 dBm to +45 dBm	DC to 110 GHz	
Three-path diode power sensors			
R&S®NRP8S/SN	–70 dBm to +23 dBm	10 MHz to 8 GHz	
R&S® NRP18S/SN	–70 dBm to +23 dBm	10 MHz to 18 GHz	
R&S®NRP18S-10	–60 dBm to +33 dBm	10 MHz to 18 GHz	
R&S®NRP18S-20	-50 dBm to +42 dBm	10 MHz to 18 GHz	
R&S®NRP18S-25	–45 dBm to +45 dBm	10 MHz to 18 GHz	
R&S®NRP33S/SN	-70 dBm to +23 dBm	10 MHz to 33 GHz	
R&S®NRP40S/SN	–70 dBm to +23 dBm	50 MHz to 40 GHz	
R&S®NRP50S/SN	-70 dBm to +23 dBm	50 MHz to 50 GHz	
Two-path diode power sensors			
R&S®NRP-Z211	-60 dBm to +20 dBm	10 MHz to 8 GHz	
R&S®NRP-Z221	-60 dBm to +20 dBm	10 MHz to 18 GHz	
Wideband power sensors			
R&S®NRP-Z81	-60 dBm to +20 dBm	50 MHz to 18 GHz	
R&S®NRP-Z85 (2.92 mm connector)	-60 dBm to +20 dBm	50 MHz to 40 GHz	
R&S®NRP-Z86 model .40 (2.4 mm connector)	-60 dBm to +20 dBm	50 MHz to 40 GHz	
R&S®NRP-Z86 model .44	-60 dBm to +20 dBm	50 MHz to 44 GHz	

More information: rohde-schwarz.com/power-sensors

Model	Level range	Frequency range	
Thermal power sensors			
R&S®NRP18T/TN	-35 dBm to +20 dBm	DC to 18 GHz	
R&S®NRP33T/TN	-35 dBm to +20 dBm	DC to 33 GHz	
R&S®NRP40T/TN	-35 dBm to +20 dBm	DC to 40 GHz	
R&S®NRP50T/TN	-35 dBm to +20 dBm	DC to 40 GHz	
R&S®NRP67T/TN	-35 dBm to +20 dBm	DC to 67 GHz	
R&S®NRP110T	-35 dBm to +20 dBm	DC to 110 GHz	
Average power sensors			
R&S®NRP6A/AN	-70 dBm to +23 dBm	8 kHz to 6 GHz	
R&S®NRP18A/AN	-70 dBm to +23 dBm	8 kHz to 18 GHz	
Power sensor modules			
R&S®NRP-Z27	-24 dBm to +26 dBm	DC to 18 GHz	
R&S®NRP-Z37	–24 dBm to +26 dBm	DC to 26.5 GHz	

Rohde & Schwarz representative



POWER SENSORS. FAST. ACCURATE. **USB- AND LAN-CAPABLE.**



ROHDE&SCHWARZ Make ideas real







R&S®NRP USB and LAN power sensors

Fast and accurate power meters - the new champions from Rohde & Schwarz. The R&S®NRPxxS/SN. R&S®NRPxxT/TN and R&S®NRPxxA/AN power sensors offer USB capability, plus the R&S®NRPxxSN, R&S®NRPxxTN and R&S®NRPxxAN sensors can be controlled via LAN. This makes the R&S®NRP power meter portfolio unique in the industry.



R&S®NRPxxS/SN

- ► More than 50000 readings/s
- ► Unprecedented measurement speed and accuracy even at low levels
- ▶ 93 dB dynamic range thanks to innovative three-path concept
- ► LAN operation via a web browser



R&S®NRPxxT/TN

- ► Outstanding performance for reference applications up to 110 GHz
- ► Excellent impedance matching
- Sophisticated connector concept
- ► LAN operation from a web browser

R&S®NRPxxA/AN

R&S®NRQ6 frequency

selective power sensor

sensitive applications.

R&S®NRQ6

detection

measurement

applications

The new frequency selective power

you to maximum depth in power measurements. It combines accurate

performance of a power sensor

and the dynamic of a spectrum

analyzer for fast and precise power

measurements from -130 dBm to

+20 dBm level range, even in price

► Frequency selective power measurement

► Frequency range: 50 MHz to 6 GHz

► Level range: -130 dBm to +20 dBm

► Automatic frequency and bandwidth

▶ 100 MHz measurement bandwidth

► RF frontend for I/Q signal analysis

Excellent impedance matching

► Continuous average, trace and ACLR

sensors from Rohde&Schwarz takes

- ► Specially designed for EMC applications
- Unprecedented measurement speed and accuracy even at low levels
- ► Frequency range: 8 kHz to 18 GHz
- ► LAN operation from a web browser

Multipath diode power sensors

The ideal combination of accuracy, measurement speed and widest dynamic range



R&S®NRP8S/SN, R&S®NRP18S/SN, R&S®NRP33S/SN, R&S®NRP40S/SN, R&S®NRP50S/SN

- ► Frequency range from 10 MHz to 50 GHz
- ► Accurate power measurements down to -70 dBm
- ► Dynamic range of 93 dB based on innovative three-path concept
- ► Fast measurement speed, precise power measurements and
- wide range of measurement functions ► Ideal for universal applications in R&D,
- installation and maintenance
- ► Sensors for high power applications up to + 45 dBm

Thermal power sensors

Outstanding linearity and maximum accuracy



R&S®NRP18T/TN, R&S®NRP33T/TN, R&S®NRP50T/TN, R&S®NRP67T/TN, R&S[®]NRP110T

- ► Frequency range from DC to 110 GHz
- ► Level range from -35 dBm to +20 dBm
- ► Only thermal sensors with LAN interface ► Innovative connector design for
- improved ease of use
- ► Outstanding performance for reference app

Power meter base unit

of every sensor

R&S®NRX

- ► Operates up to four R&S®NRP-Zxx power sensors in parallel
- ► Numerical or graphical display of measurement results depending on the measurement function
- ► Remote control operation via
 - Ethernet, GPIB and USB Emulates legacy power meters
 - Sensor check source (optional)
 - Thermal waveguide sensors

Highest measurement accuracy for complex measurement tasks



R&S®NRP75TWG, R&S®NRP90TWG and R&S[®]NRP110TWG

- ► Convenient and accurate solution with
- ► Control and monitoring via USB and
- R&S®NRX ► Outstanding performance for reference
- applications



Supports all measurement functions



- ► Intuitive user interface (window-based)

Virtual power meter

Convenient power measurements via PC based software



R&S®NRPV

- ► R&S®NRP-Zxx power sensors can be connected to a laptop or PC via a USB adapter and controlled via the R&S®NRPV virtual power meter PC software
- Numerical display (continuous) average, timeslot average, timegate average and burst average mode)
- Multiple traces in one window
- Extremely flexible marker functions
- ► Dongle-free on multiple PCs through intelligent licensing concept



► Dynamic range: -35 dBm to +20 dBm integrated waveguide interfaces

Wideband power sensors Outstanding dynamic range for trace measurements



R&S®NRP-Z8x

- ► Frequency range from 50 MHz to 44 GHz
- ► Level range from -60 dBm to +20 dBm
- ► Accurate envelope power analysis
- ► Automatic pulse analysis
- ► Statistical analysis
- ► High resolution mode
- ► Master-slave triggering (with the R&S®NRP2 base unit or the R&S®NRP-Z5 USB sensor hub)
- ► Ideal for radar applications and for analysis of complex modulated signals