

ROHDE & SCHWARZ

NRT

The Rohde & Schwarz NRT is a directional power meter base unit designed to measure forward power and reflection under operational conditions. Connected between source and load, it provides simultaneous monitoring of power flow in both directions for installation, maintenance, and testing applications. With support for R&S NRT-Z and NAP-Z intelligent sensors, the NRT features advanced measurement functions including average power, peak envelope power, crest factor, and complementary cumulative distribution function (CCDF) across various digital modulation standards.

SPECIFICATIONS

General

Interfaces	IEC 625 (IEEE 488), RS-232 (9-pin D-Sub), AUX (BNC)
Display	LCD (Simultaneous digital and analog indication)

Measurement Capabilities

Frequency Range	200 kHz to 4 GHz (sensor dependent)
Power Measurement Range	0.7 mW to 2 kW (sensor dependent)
Averaging	Automatic (depends on selected resolution and sensor characteristics)

Measurement Functions

Power Measurements	Forward power, power absorbed by load
Power Parameters	Average power, average burst power, peak envelope power (PEP), crest factor, CCDF
Reflection Measurements	SWR, return loss, reflection coefficient, reverse-to-forward power ratio (%), reverse power

Accuracy and Performance

Zero Adjustment	Selectable with RF power switched off (approx. 5 s duration)
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Sensor Interfaces

Supported Sensor Series	R&S NRT-Z, R&S NAP-Z
Front Panel Sensor Connectors	1 input (for R&S NRT-Z sensors)
Rear Panel Sensor Connectors	2 inputs for NRT-Z (option R&S NRT-B2); 1 input for NAP-Z (option R&S NRT-B1)
Frequency Response Correction	Uses stored sensor correction factors; 3 sets of calibration factor memory for NAP-Z sensors

Display and User Interface

Digital Display Units	W, dBm, dB, %
Display Resolution (HIGH)	4½ digits (0.001 dB)
Display Resolution (LOW)	3½ digits (0.01 dB)
Min/Max Tracking	Current maximum, minimum, or difference value (Max-Min)
Beeper	For SWR monitoring (selectable threshold) and keystroke acoustic echo

Connectivity and I/O

AUX Connector	BNC (Signaling output or TTL trigger input)
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TECHNOLOGY

Directional Power Measurement

APPLICATIONS

Installation, maintenance, and monitoring of transmitters, amplifiers, antennas, and industrial RF/microwave generators

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.