

ROHDE & SCHWARZ

ZNB8

The Rohde & Schwarz ZNB8 is a high-performance vector network analyzer designed for demanding RF component development, production, and service applications. Operating from 9 kHz to 8.5 GHz, it features exceptional measurement speed, high dynamic range, and outstanding temperature stability.

SPECIFICATIONS

General

Interfaces	LAN, USB, GPIB (optional)
Display	12.1" high-resolution touchscreen

Physical

Operating Temperature	+5 °C to +40 °C °C
Dimensions (W×H×D)	461 mm × 240 mm × 351 mm mm
Weight	13.7 kg kg

RF Performance & Port Characteristics

Frequency Range Min	9 kHz
Frequency Range Max	8.5 GHz
Frequency Resolution	1 Hz
Test Port Connector Type	N female
Test Port Impedance	50 Ω
Test Port Input Match (9 kHz to 20 kHz)	>10 dB
Test Port Input Match (20 kHz to 8.5 GHz)	>20 dB
Output Power Range (2.5 GHz to 7.5 GHz, Standard)	–55 dBm to +10 dBm
Typical Output Power (2.5 GHz to 7.5 GHz, Standard)	+13 dBm
Output Power Range (7.5 GHz to 8.5 GHz, Standard)	–55 dBm to +8 dBm
Typical Output Power (7.5 GHz to 8.5 GHz, Standard)	+12 dBm
Output Power Range (2.5 GHz to 7.5 GHz, with Option B22)	–85 dBm to +10 dBm
Typical Output Power (2.5 GHz to 7.5 GHz, with Option B22)	+13 dBm
Output Power Range (7.5 GHz to 8.5 GHz, with Option B22)	–85 dBm to +8 dBm
Typical Output Power (7.5 GHz to 8.5 GHz, with Option B22)	+12 dBm

Receiver Characteristics & Dynamic Range

System Dynamic Range (at 10 Hz IF Bandwidth)	up to 140 dB
Dynamic Range (9 kHz to 100 kHz)	>100 dB
Typical Dynamic Range (9 kHz to 100 kHz)	122 dB
Dynamic Range (100 kHz to 50 MHz)	>120 dB
Typical Dynamic Range (100 kHz to 50 MHz)	138 dB
Dynamic Range (50 MHz to 4 GHz)	>130 dB
Typical Dynamic Range (50 MHz to 4 GHz)	140 dB
Dynamic Range (4 GHz to 7 GHz)	>125 dB
Typical Dynamic Range (4 GHz to 7 GHz)	138 dB
Test Port Damage Level	+27 dBm
Test Port Damage DC Voltage	30 V
IF Bandwidth Range (Standard)	1 Hz to 1 MHz
IF Bandwidth Range (with Increased Bandwidth option)	1 Hz to 10 MHz

Measurement Capabilities & Formats

Number of Sweep Points per Trace	2 to 100001
Measured Parameters	Mixed-mode S-parameters
Time-Domain Analysis (DTF)	Supported

Calibration & Accuracy Enhancement

Calibration Methods Supported	Manual and automatic
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System & Connectivity Interfaces

Touchscreen Capability	Yes
Display Resolution	1280 × 800 pixels (WXGA)

Software & Functional Options

Operating System	Windows
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Reference Frequency

Frequency Aging per Year (Standard)	$\pm 1 \times 10^{-6}$
Frequency Aging per Year (with Option B4)	$\pm 1 \times 10^{-7}$
Frequency Temperature Stability (Standard)	$\pm 1 \times 10^{-6}$ (+5 °C to +40 °C)
Frequency Temperature Stability (with Option B4)	$\pm 1 \times 10^{-8}$ (+5 °C to +40 °C)

Interfaces

External Monitor Port	DVI-D
Number of USB Ports (Front)	4 (USB 2.0)

TECHNOLOGY

Vector Network Analysis

APPLICATIONS

RF component testing, mobile radio, and electronic goods manufacturing

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