

KEYSIGHT TECHNOLOGIES (AGILENT HP)

E8363B

The Agilent (Keysight) E8363B is a high-performance 2-port Vector Network Analyzer (VNA) from the PNA Series, designed for precision high-frequency component testing. Operating from 10 MHz to 40 GHz, it provides excellent measurement accuracy, high speed, and a system dynamic range of 110 dB, serving demanding applications in RF and microwave characterization.

SPECIFICATIONS

General

Interfaces	GPIO (IEEE-488), LAN (10/100 Base-T), USB, VGA
Display	10.4-inch color LCD touchscreen
Operating System	Windows 2000 or Windows XP (configuration dependent)

Physical

Power Supply	100 to 240 VAC, 50/60 Hz
Operating Temperature	0 to 40 °C

Frequency Characteristics

Frequency Range	10 MHz - 40 GHz
Frequency Resolution	1 Hz
Internal Timebase Reference	10 MHz

Sweep Characteristics

Sweep Types	Linear frequency, CW time, Power sweep, Segment sweep
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Measurement Capabilities & Data Processing

Measurement Parameters (S-Parameters)	S11, S21, S12, S22
Calibration Methods	SOLT, TRL
Electronic Calibration (ECal) Support	Yes
Time Domain Analysis	Supported (Option 010)
Frequency Offset Mode	Supported (Option 080)
Direct Receiver Access	Supported (Option 014)

Hardware and Test Port Characteristics

Number of Test Ports	2
Test Port Connector Type	2.4 mm (male)
Test Port Impedance	50 Ω nominal

Connectivity & Rear Panel Interfaces

External Reference Input (10 MHz)	Yes
External Reference Output (10 MHz)	Yes

Performance

Number of Measurement Channels	Up to 32 independent channels
IF Bandwidth Settings	1 Hz to 40 kHz

Measurement Capabilities

Display Data Formats	Log magnitude, linear magnitude, phase, unwrapped phase, group delay, SWR, Smith chart, polar, real, imaginary
Number of Markers	10 independent markers per trace (plus reference marker)
Limit Testing	Segmented limit lines with visual and audio Pass/Fail indication
Data Export Formats	Touchstone (.s1p, .s2p), CITIfile, PRN/CSV
Group Delay Aperture	Selectable, up to 20% of frequency span

RF Source Specifications

Source Power Resolution	0.01 dB
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Connectivity & Control

External Trigger Input	BNC (female), TTL/CMOS compatible
External Trigger Output	BNC (female), TTL/CMOS compatible

Options & Upgrades

Option 081	Reference Receiver Switch (adds a switch in the reference receiver path)
Option 083	Frequency Converter Measurement Application (FCA)

TECHNOLOGY

Vector Network Analysis

APPLICATIONS

High-frequency RF and microwave component testing

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