

KEYSIGHT TECHNOLOGIES (AGILENT HP)

E8364A

The Keysight Agilent E8364A is a high-performance PNA series vector network analyzer designed for microwave component testing up to 50 GHz. It features two measurement ports, a built-in synthesized source, and a highly configurable test set to deliver high dynamic range and fast sweep speeds for accurate characterization of active and passive devices.

SPECIFICATIONS

General

Interfaces	GPIO, LAN, USB, VGA, Parallel, Serial
Display	8.4-inch color LCD

Physical

Power Supply	100 to 240 VAC ($\pm 10\%$), 47 to 63 Hz, 350 W maximum
Operating Temperature	5 °C to +40 °C °C
Dimensions (W×H×D)	425 mm × 244 mm × 498 mm mm
Weight	27 kg

Frequency & Power

Frequency Range	45 MHz to 50 GHz
Frequency Resolution	1 Hz

Hardware & System

Number of Test Ports	2
Test Port Impedance	50 ohms
Test Port Connector Type	2.4 mm (male)
Internal Operating System	Windows

Measurement Speed & Range

Number of Measurement Points	1 to 16,001 (user selectable)
Sweep Types	Linear, Log, Segment, Power

Receiver Performance

System Dynamic Range	111 dB @ 50 GHz (typical)
----------------------	---------------------------

General Specifications

Recommended Calibration Cycle	1 year
-------------------------------	--------

Performance

Trace Noise (Magnitude)	< 0.006 dB RMS (45 MHz to 45 GHz, 1 kHz IF bandwidth)
Trace Noise (Phase)	< 0.05° RMS (45 MHz to 45 GHz, 1 kHz IF bandwidth)
IF Bandwidth Range	1 Hz to 40 kHz
Test Port Damage Level	+30 dBm or 40 VDC
Frequency Aging Rate	±1.0 ppm/year
Frequency Temperature Stability	±0.05 ppm/°C
Maximum Traces per Channel	16
Measurement S-Parameters	S11, S12, S21, S22

Environmental

Storage Temperature Range	-40 °C to +70 °C
Operating Humidity Range	10% to 90% non-condensing

Compliance

EMC Compliance	Complies with European EMC Directive 89/336/EEC (EN 61326)
Safety Compliance	Complies with European Low Voltage Directive 73/23/EEC (EN 61010-1)

Receiver

Number of Receivers	4
---------------------	---

Source

Source Power Resolution	0.01 dB
Maximum Leveled Source Power (45 GHz to 50 GHz)	-5 dBm (spec) / +2 dBm (typical)

Source Options

Source Attenuators	60 dB in 10 dB steps (with Option UNL)
--------------------	--

Receiver Options

Receiver Attenuators	35 dB in 5 dB steps (with Option 016)
----------------------	---------------------------------------

Rear Panel I/O

10 MHz Reference Input	BNC female, 10 MHz ± 1 ppm (typical)
10 MHz Reference Output	BNC female, 10 MHz, 0 dBm ± 3 dB
External Trigger Input	BNC female, TTL compatible
External Trigger Output	BNC female, TTL compatible
Auxiliary Analog Inputs	Four BNC connectors, ±10 V range
VGA Video Output	15-pin D-Sub, compatible with VGA/SVGA monitors

TECHNOLOGY

Vector Network Analyzer

APPLICATIONS

Microwave Component Characterization, RF Design and 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.