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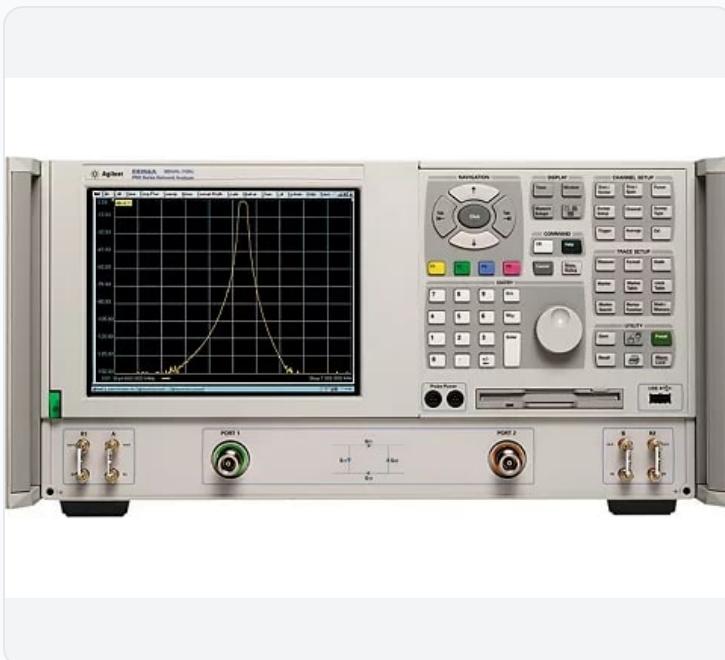
Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent / Keysight E8363A 40 GHz PNA Series Network Analyzer

Agilent / Keysight E8363A PNA Microwave Network Analyzer 45 MHz to 40 GHz The Agilent E8363A isaPNA Series microwave vector network analyzer covering 45 MHz to 40 GHz. OEM PNA microwave data sheets for the E836xA family list standard-configuration system dynamic range reaching 123 dB from 10 to 20 GHz in 10 Hz IFBW at the test port, frequency resolution of 1 Hz, and CW accuracy of plus or minus 1 ppm. Broadband microwave S-parameter test, filter rejection, amplifier characterization, and production VNA measurements across the model frequency span. The Agilent E8363A isaPNA Series microwave vector network analyzer covering 45 MHz to 40 GHz. OEM PNA microwave data sheets for the E836xA family list standard-configuration system dynamic range reaching 123 dB from 10 to 20 GHz in 10 Hz IFBW at the test port, frequency resolution of 1 Hz, and CW accuracy of plus or minus 1 ppm. Broadband microwave S-parameter test, filter rejection, amplifier characterization, and production VNA measurements across the model frequency span. PNA Windows-based multi-channel architecture



MODEL

**Agilent / Keysight
E8363A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

E8363A

LISTING

<https://aumictechlabs.com/products/e8363a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight E8363A is a 2-port network analyzer delivering RF and microwave characterization across 10 MHz to 40 GHz. Built for aerospace, defense, and communications applications, it combines 120 dB dynamic range with 29 μ s measurement speed per data point, enabling rapid S-parameter acquisition across 401-point traces. The instrument achieves ± 0.05 dB source power accuracy and 0.001 dB RMS trace noise at 1 GHz, supporting SOLT, TOSM, and multi-step calibration routines. Advanced measurement modes include gain compression, intermodulation distortion, group delay, VSWR, and phase analysis. IF bandwidth spans 1 Hz to 10 MHz with 20 MHz IF output and < -105 dB residual response at 10 GHz. A color LCD display, USB 2.0, LAN, and GPIB interfaces enable both local operation and remote control via SCPI commands and Windows-compatible drivers. Software integration supports Agilent/Keysight VEE, MATLAB, LabVIEW, and Python.

Technical Specifications

Frequency Range:	10 MHz to 40 GHz
Ports:	2-Port configuration
Dynamic Range:	120 dB at 10 Hz IF bandwidth
Source Power:	-60 dBm to +10 dBm
Source Power Accuracy:	± 0.05 dB
Measurement Speed:	29 μ s/data point (full 2-port S-parameters, 401 points)
Trace Noise:	0.001 dB RMS at 1 GHz
IF Bandwidth:	1 Hz to 10 MHz
IF Output:	20 MHz
Reference Level Accuracy:	± 0.05 dB
Residual Response:	< -105 dB at 10 GHz
Dimensions:	177 mm H $\times$ 438 mm W $\times$ 480 mm D
Weight:	16.3 kg
Power:	100–240 VAC, 50/60 Hz

Key Features

- Calibration methods: SOLT, TOSM, response, one-port, adapter refinement, and full two-port configurations
- Measurement parameters: S11, S12, S21, S22, group delay, gain compression, output power, phase, VSWR
- Color LCD display with internal memory and USB external storage
- SCPI command language support for automated control

Typical Applications

- Component and system characterization in RF and microwave design
- Manufacturing validation and quality assurance
- Aerospace and defense subsystem testing
- Communications equipment performance assessment

Compatibility & Integration

Connectivity includes LAN, USB 2.0, and GPIB interfaces. Windows-compatible operation enables integration with Agilent/Keysight VEE, MATLAB, LabVIEW, and Python via SCPI drivers. Compatible with standard RF/microwave accessories including power meters, signal generators, attenuators, and directional couplers.

E8363A Characteristics / Specifications

PARAMETER	VALUE
Model	E8363A
Instrument Type	PNA microwave network analyzer
Frequency Range	45 MHz to 40 GHz
Port Count Class	2
Frequency Resolution	1 Hz
Cw Accuracy	plus or minus 1 ppm
Frequency Stability Typical	plus or minus 1 ppm 0 to 40 C
Nominal Source Power Standard	-17 dBm
System Dynamic Range 45 To 500 Mhz Standard	94 dB in 10 Hz IFBW
System Dynamic Range 500 Mhz To 2 Ghz Standard	119 dB in 10 Hz IFBW
System Dynamic Range 2 To 10 Ghz Standard	122 dB in 10 Hz IFBW
System Dynamic Range 10 To 20 Ghz Standard	123 dB in 10 Hz IFBW
System Dynamic Range 20 To 30 Ghz Standard	114 dB in 10 Hz IFBW
System Dynamic Range 30 To 40 Ghz Standard	110 dB in 10 Hz IFBW
Receiver Dynamic Range 10 To 20 Ghz Standard	125 dB in 10 Hz IFBW
Power Level Accuracy 45 Mhz To 10 Ghz	plus or minus 1.5 dB variation from nominal in range 0
Power Level Accuracy 10 To 20 Ghz	plus or minus 2.0 dB variation from nominal in range 0
Power Level Linearity 45 Mhz To 20 Ghz	plus or minus 1.0 dB at nominal power
Source Power Range 45 Mhz To 10 Ghz Standard Class	-25 to +5 dBm
Source Power Range 10 To 20 Ghz Standard Class	-24 to +3 dBm

PARAMETER	VALUE
If Bandwidth Spec Condition	10 Hz IFBW dynamic range tables
Interfaces	LAN USB GPIB class PNA
Calibration Class	ECal and mechanical full two-port family
Card Geometry	benchtop PNA microwave analyzer
Family	PNA Series E836xA
Bandwidth	Spec Condition: 10 Hz IFBW dynamic range tables

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications

Specifications

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Model	E8363A
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Frequency Stability Typical	plus or minus 1 ppm 0 to 40 C
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System Dynamic Range 45 To 500 Mhz Standard: 94 dB in 10 Hz IFBW
System Dynamic Range 500 Mhz To 2 Ghz Standard: 119 dB in 10 Hz IFBW
System Dynamic Range 2 To 10 Ghz Standard: 122 dB in 10 Hz IFBW
System Dynamic Range 10 To 20 Ghz Standard: 123 dB in 10 Hz IFBW
System Dynamic Range 20 To 30 Ghz Standard: 114 dB in 10 Hz IFBW
System Dynamic Range 30 To 40 Ghz Standard: 110 dB in 10 Hz IFBW
Receiver Dynamic Range 10 To 20 Ghz Standard: 125 dB in 10 Hz IFBW
Power Level Accuracy 45 Mhz To 10 Ghz: plus or minus 1.5 dB variation from nominal in range 0
Power Level Accuracy 10 To 20 Ghz: plus or minus 2.0 dB variation from nominal in range 0
Power Level Linearity 45 Mhz To 20 Ghz: plus or minus 1.0 dB at nominal power
Source Power Range 45 Mhz To 10 Ghz Standard Class: -25 to +5 dBm
Source Power Range 10 To 20 Ghz Standard Class: -24 to +3 dBm

Specifications

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Card Geometry	benchtop PNA microwave analyzer
Family	PNA Series E836xA

Notes

From Agilent PNA Series Microwave Network Analyzers E8362A/E8363A/E8364A data sheet. Configurable test set Option 014 and UNL extended power change dynamic range and available power.

Ordering Information

OPTION	DESCRIPTION
Option 014	and UNL extended power change dynamic range and available power.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech
788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.