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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 8753A Network Analyzer

Three tuned receivers for independent or ratio measurements External S-parameter test set architecture 801 point traces versus 1601 on later 8753B/C Series Family: HP Agilent 8753A/B/C/D/E/ES/ET Receiver Dynamic Range: 100 dB from 300 kHz to 3 GHz Dynamic Accuracy: plus or minus 0.05 dB, plus or minus 0.3 deg over 50 dB input range Input Crosstalk 300 kHz to 1 GHz: minus 100 dB Harmonic Measurements Option 002: not available on 8753A



MODEL

**Agilent / Keysight
8753A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

8753A

LISTING

<https://aumictechlabs.com/products/8753a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight 8753A Network Analyzer is a dual-channel instrument for RF and microwave device characterization across 300 kHz to 3 GHz. It delivers measurements of S-parameters, impedance, and time-domain response with >100 dB dynamic range and 0.05 dB accuracy over 40 dB spans. Technical Specifications Frequency Range: 300 kHz to 3 GHz Frequency Resolution: 1 Hz Frequency Accuracy: ± 10 ppm Dynamic Range: >100 dB Output Power Range: -5 to +20 dBm Source Output Power: >100 mW Output Impedance: 50 ohms Measurement Accuracy (Dynamic): 0.05 dB over 40 dB range Test Port Connectors: Precision 7 mm RF Connectors: Type N (female) Digitized Points per Sweep: Up to 1601 per channel Display: 9-inch diagonal high-resolution screen Display Formats: Log magnitude, SWR, phase, group delay, polar, Smith Chart Key Features Two independent measurement channels for simultaneous parameter capture Integrated synthesized source with fine 1 Hz resolution across the full band Three-input receiver section

enabling flexible device configurations Time-domain analysis capability (Option 010): low-pass TDR mode and simulated transient response Marker functions for peak search, minimum detection, and target-value location Full programmability via HP-IB (Hewlett-Packard Interface-Bus) Built-in calibration enhancement for sustained measurement accuracy Typical Applications Linear characterization of passive and active components, PCB transmission lines, filters, amplifiers, and microwave assemblies. Lab and production environments benefit from measurement speeds and repeatability across the VHF through microwave bands. Compatibility & Integration Works with S-Parameter test sets (HP 85046A/B, HP 85047A) for extended device access. Precision 7 mm test ports and Type-N connectors interface with standard test cables. Accepts external control through HP-IB interface for automated test sequences and data logging.

8753A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Vector network analyzer
Series Family	HP Agilent 8753A/B/C/D/E/ES/ET
Frequency Range	300 kHz to 3 GHz
Frequency Range Option 0	not available on 8753A
Frequency Resolution	1 Hz
Frequency Accuracy at 25 C	plus or minus 10 ppm
Source Power Range	minus 5 to plus 20 dBm
Power Accuracy 50 MHz plus 10 dBm	plus or minus 0.5 dB
Power Linearity 0 to plus 15 dBm Relative plus 10 dBm	plus or minus 0.2 dB
Power Linearity minus 5 to 0 dBm Relative plus 10 dBm	plus or minus 0.5 dB
Power Linearity plus 15 to plus 20 dBm Relative plus 10 dBm	plus or minus 0.5 dB
Source Impedance	50 ohm
Harmonics at plus 20 dBm	less than or equal to minus 25 dBc
Harmonics Typical at 0 dBm	less than or equal to minus 50 dBc
Receiver Dynamic Range	100 dB from 300 kHz to 3 GHz
Maximum Input Level	0 dBm
Sensitivity 3 kHz BW	minus 90 dBm
Sensitivity 10 Hz BW	minus 100 dBm
Dynamic Accuracy	plus or minus 0.05 dB, plus or minus 0.3 deg over 50 dB input range
Input Crosstalk 300 kHz to 1 GHz	minus 100 dB
Input Crosstalk 1 to 3 GHz	minus 90 dB
Maximum Measurement Points	801
Display	monochrome CRT
Test Set	external S-parameter

PARAMETER	VALUE
Channels	2
Time Domain Option 0	available
Harmonic Measurements Option 0	not available on 8753A
Power Meter Calibration	not available on 8753A
Test Sequencing	not available on 8753A
Remote Interface	HP-IB
Source Sweep Types	linear, log, list, power, and CW class of the 8753 source
System Dynamic Range 300 kHz to 16 MHz	100 dB
System Dynamic Range 16 MHz to 1.3 GHz	100 dB
Power linearity	0 to plus 15 dBm Relative plus 10 dBm: plus or minus 0.2 dB

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	
PARAMETER	VALUE
Instrument Type	Vector network analyzer
Series Family	HP Agilent 8753A/B/C/D/E/ES/ET
Frequency Range	300 kHz to 3 GHz
Frequency Range Option 006	not available on 8753A
Frequency Resolution	1 Hz
Frequency Accuracy at 25 C	plus or minus 10 ppm
Source Power Range	minus 5 to plus 20 dBm
Power Accuracy 50 MHz plus 10 dBm	plus or minus 0.5 dB
Power Linearity 0 to plus 15 dBm Relative plus 10 dBm: plus or minus 0.2 dB	
Power Linearity minus 5 to 0 dBm Relative plus 10 dBm: plus or minus 0.5 dB	
Power Linearity plus 15 to plus 20 dBm Relative plus 10 dBm: plus or minus 0.5 dB	
Specifications	
PARAMETER	VALUE
Source Impedance	50 ohm
Harmonics at plus 20 dBm	less than or equal to minus 25 dBc
Harmonics Typical at 0 dBm	less than or equal to minus 50 dBc
Receiver Dynamic Range	100 dB from 300 kHz to 3 GHz
Maximum Input Level	0 dBm
Sensitivity 3 kHz BW	minus 90 dBm
Sensitivity 10 Hz BW	minus 100 dBm
Dynamic Accuracy	plus or minus 0.05 dB, plus or minus 0.3 deg over 50 dB input range
Input Crosstalk 300 kHz to 1 GHz	minus 100 dB
Input Crosstalk 1 to 3 GHz	minus 90 dB
Maximum Measurement Points	801
Display	monochrome CRT
Test Set	external S-parameter

PARAMETER	VALUE
Channels	2
Time Domain Option 010	available
Harmonic Measurements Option 002	not available on 8753A
Power Meter Calibration	not available on 8753A
Test Sequencing	not available on 8753A
Remote Interface	HP-IB
Source Sweep Types	linear, log, list, power, and CW class of the 8753 source

System Dynamic Range 300 kHz to 16 MHz: 100 dB

System Dynamic Range 16 MHz to 1.3 GHz: 100 dB

Notes

Numeric rows from HP 8753 family specification summaries and the 8753A/B/C comparison table. 8753A has no Option 006 6 GHz path; system dynamic range with an external test set depends on the test-set path. Source power and receiver rows match the 8753C family source/receiver table used through 3 GHz.

Ordering Information

OPTION	DESCRIPTION
Option 006	6 GHz extension.
Option 010	available

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

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<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.