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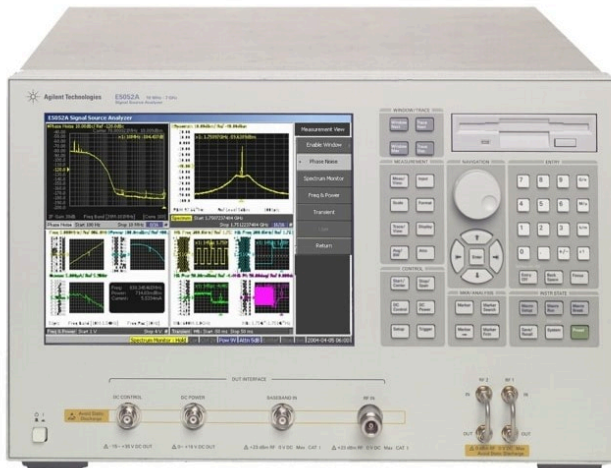
Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight E5052A

Keysight / Agilent E5052A Signal Source Analyzer 10 MHz to 7 GHz The Keysight/Agilent E5052A is the prior-generation signal source analyzer covering 10 MHz to 7 GHz RF phase-noise and frequency-domain source characterization, with microwave extension via companion downconverters. OEM E5052 family documentation shares the Type-N RF IN architecture, stepped input attenuator, and SSB phase-noise / residual-FM measurement parameter set later refined in the E5052B. Oscillator and synthesizer phase-noise measurements, VCO characterization, and RF source residual-noise analysis. The Keysight/Agilent E5052A is the prior-generation signal source analyzer covering 10 MHz to 7 GHz RF phase-noise and frequency-domain source characterization, with microwave extension via companion downconverters. OEM E5052 family documentation shares the Type-N RF IN architecture, stepped input attenuator, and SSB phase-noise / residual-FM measurement parameter set later refined in the E5052B. Oscillator and synthesizer phase-noise measurements, VCO characterization, and RF source residual-noise analysis.



MODEL

**Agilent / Keysight
E5052A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

E5052A

LISTING

<https://aumictechlabs.com/products/e5052a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight E5052A Signal Source Analyzer delivers phase noise, frequency, power, DC current, spectrum, and transient measurements in a single instrument. Operating from 10 MHz to 7 GHz (expandable to 26.5 GHz or 110 GHz with external down converters), it characterizes RF and

microwave signal sources including synthesizers, VCOs, and clocks across communication systems and radar applications.

Technical Specifications

Frequency Coverage & Measurement Range Base frequency range: 10 MHz to 7 GHz Extended range with external down converters: to 26.5 GHz or 110 GHz Phase noise offset frequencies: 1 Hz to 40 MHz (standard); Option E5052A-011 extends lower limit to 10 Hz Phase noise sensitivity: Better than -178 dBc/Hz Transient frequency resolution: 5 Hz to 7 kHz (Heterodyne mode) Frequency transient range: 1.6 to 25.6 MHz (Heterodyne mode) Phase Noise Measurement Two-channel cross-correlation technique reduces noise floor independent of reference source Correlation capability: 1 to 10,000 correlations (standard) Accuracy: ± 4 dB (1–100 Hz offset), ± 4 dB (100 Hz–1 kHz), ± 2 dB (1 kHz–1 MHz), ± 3 dB (1 MHz–40 MHz) Spurious level: Typically 65 dBc at offsets greater than 1 kHz Built-in LO phase noise optimization for close-in (150 kHz) measurements Transient Analysis Time resolution: 10 nanoseconds to 160 microseconds Measured parameters: Frequency, phase, and power versus time Direct mode pretrigger: Up to 4.8 GHz maximum, $\pm 80\%$ time span or ± 1 second DC Current & Voltage Measurement Control voltage/current: -15 to +35 VDC, 20 mA max DUT power: 0 to +16 VDC, 80 mA max

Key Features Available in Benchtop, Plug-In (1/1EE), and Rackmount (1/1CM / 1CP) configurations Windows-based graphical interface with hard key, touchscreen, and mouse control Real-time spectrum monitoring Internal 10 GB minimum hard drive for states and trace data CSV trace export; LAN and USB (USBTMC) file sharing to external Windows PC

Typical Applications Synthesizer and VCO characterization and optimization Clock source phase noise analysis Communication system signal source evaluation Radar system source qualification

E5052A Characteristics / Specifications

PARAMETER	VALUE
Model	E5052A
Instrument Type	Signal source analyzer
Rf In Frequency Range	10 MHz to 7 GHz
Rf In Connector Class	Type-N female 50 ohm class
Measurement Level Class	-20 dBm to +20 dBm class above 30 MHz family table
Input Attenuator Class	0 to 35 dB in 5 dB steps family table
Input Damage Level Ac Class	greater than +23 dBm class
Input Damage Level Dc Class	greater than 5 V class
Measurement Parameters	SSB phase noise, spurs, residual FM, integrated phase/jitter
Offset Frequency Coverage Class	Hz to tens of MHz class per carrier band tables
Cross Correlation Path	Available on E5052 family enhanced sensitivity modes
Microwave Extension	Compatible E5053-class downconverter path to 26.5/110 GHz class
Remote Interfaces	GPIB LAN USB class
Display	Built-in SSA color display class
Installed Options	Determine final calibrated configuration
Safety Class	Observe published maximum ratings
Chassis Form	benchtop signal source analyzer
Related Successor	E5052B
Brand Lineage	Keysight / Agilent
Warmup Spec Class	30 minutes class for warranted specs
Operating Temperature Spec Class	23+/-5 C class for stated specs
Documentation Scope	OEM E5052 Series published tables
Manufacturer Documentation	OEM datasheet and user documentation
Operating temperature	Spec Class: 23+/-5 C class for stated specs

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Spec Class: 23+/-5 C class for stated specs
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Documentation Scope	OEM E5052 Series published tables
Manufacturer Documentation	OEM datasheet and user documentation Notes From Keysight/Agilent E5052 Series signal source analyzer documentation. Prefer the installed option list and E5052A-specific sheet for warranted phase-noise sensitivity numbers.

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	
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Warmup Spec Class	30 minutes class for warranted specs
Operating Temperature Spec Class	23+/-5 C class for stated specs
Documentation Scope	OEM E5052 Series published tables
Manufacturer Documentation	OEM datasheet and user documentation
Notes	
From Keysight/Agilent E5052 Series signal source analyzer documentation. Prefer the installed option list and E5052A-specific sheet for warranted phase-noise sensitivity numbers.	

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

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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.