

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 5, 2026

KEYSIGHT

Keysight (Agilent) E5501A Phase Noise Measurement Solution, 50 kHz to 1.6 GHz

Keysight (Agilent) E5501A Phase Noise Measurement Solution, 50 kHz to 1.6 GHz The Keysight/Agilent E5501A is an E5500 A-series phase noise measurement solution configured for carrier frequencies from 50 kHz to 1.6 GHz. Designed to minimize production ATE test times for one-port VCOs, DROs, crystal oscillators, and synthesizers. A-series offset capability typically 0.01 Hz to 4 MHz (extendable with options). Includes phase noise test set hardware (70420A/N5500A class), digitizer path, and measurement software with a PC. Later unified under E5505A systems. The Keysight/Agilent E5501A is an E5500 A-series phase noise measurement solution configured for carrier frequencies from 50 kHz to 1.6 GHz. Designed to minimize production ATE test times for one-port VCOs, DROs, crystal oscillators, and synthesizers. A-series offset capability typically 0.01 Hz to 4 MHz (extendable with options). Includes phase noise test set hardware (70420A/N5500A class), digitizer path, and measurement software with a PC. Later unified under E5505A systems. Production ATE phase-noise test of oscillators and synthesizers; AM noise; absolute/residual PN characterization to 1.6 GHz.

No photo

MODEL

Keysight E5501A

CALIBRATION

**N/A — off-catalog
OEM datasheet**

CONDITION

**See OEM
documentation**

STATUS

**Not listed on
Aumictech
inventory**

RFQ / SKU

E5501A

LISTING

**Off-catalog — OEM dat
asheet only**

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

Features & description

From manufacturer datasheet

Features

- Carrier frequency: 50 kHz to 1.6 GHz
- A-series offsets: 0.01 Hz to 4 MHz (standard class; options extend)
- Fast ATE-oriented measurements
- Direct AM noise measurement capability
- Related models: E5502A (6 GHz), E5503A (18 GHz), E5504A (26.5 GHz); B-series extend offsets to 100 MHz

E5501A Characteristics / Specifications

PARAMETER	VALUE
Model	E5501A
Manufacturer	Keysight Technologies (Agilent)
Instrument Type	Phase Noise Measurement Solution
Family	E5500 A-Series
Alias	E5501A; Agilent E5501A Frequency
Carrier range	50 kHz to 1.6 GHz
Carrier frequency	50 kHz to 1.6 GHz
A-series offsets	0.01 Hz to 4 MHz (standard class; options extend)
Related models	E5502A (6 GHz), E5503A (18 GHz), E5504A (26.5 GHz); B-series extend offsets to 100 MHz

E5501A Specifications

PARAMETER	VALUE
Applications	Production ATE phase-noise test of oscillators and synthesizers; AM noise; absolute/residual PN characterization to 1.6 GHz.
Key Features	- Carrier frequency: 50 kHz to 1.6 GHz
Technical Specifications	Model: E5501A
Frequency	Carrier range: 50 kHz to 1.6 GHz
Operational Notes	Prefer Agilent E5500 Series datasheet 5989-0851 / configuration guide. Successor rack systems include E5505A.

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
Model	E5501A
Manufacturer	Keysight Technologies (Agilent)
Instrument Type	Phase Noise Measurement Solution
Family	E5500 A-Series
Alias	E5501A; Agilent E5501A

Frequency

Carrier range: 50 kHz to 1.6 GHz

Offset range (A-series): 0.01 Hz to 4 MHz (standard published class)

System Architecture

Phase noise test set with phase detectors / PLL; baseband digitizer; PC software automation

Operational Notes

Prefer Agilent E5500 Series datasheet 5989-0851 / configuration guide. Successor rack systems include E5505A.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: N/A — off-catalog OEM datasheet. See OEM documentation · Not listed on Aumictech inventory.

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

Aumictech

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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.