

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 12, 2026

KEYSIGHT / AGILENT

Keysight (Agilent) N8973A Noise Figure Analyzer 10 MHz to 3 GHz

Keysight / Agilent N8973A NFA Series Noise Figure Analyzer The N8973A is an Agilent/Keysight NFA-series dedicated noise figure analyzer covering 10 MHz to 3.0 GHz. Corrected NF and gain measurements with SNS or BNC-driven noise sources; LO GPIB for converter modes. The N8973A is an Agilent/Keysight NFA-series dedicated noise figure analyzer covering 10 MHz to 3.0 GHz. Corrected NF and gain measurements with SNS or BNC-driven noise sources; LO GPIB for converter modes.



MODEL

**Keysight / Agilent
N8973A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N8973A

LISTING

<https://aumictechlabs.com/products/n8973a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight (Agilent) N8973A Noise Figure Analyzer delivers noise characterization from 10 MHz to 3 GHz. This instrument performs simultaneous noise figure and gain measurements on amplifiers and frequency translating devices with measurement speeds under 50 ms per measurement at 8 averages. Its intuitive interface, color graphical display with limit lines and marker functions, and low instrument uncertainty enable fast, repeatable characterization across RF and microwave components. Technical Specifications Frequency Range: 10 MHz to 3.0 GHz Measurement Bandwidth: User-selectable across six options - 4 MHz, 2 MHz, 1 MHz, 400 kHz, 200 kHz, and 100 kHz Measurement Speed: Nominally <50 ms per measurement with 8 averages;

<100 ms per measurement with 64 averages Power Requirements: 195 to 250 V rms, 47 to 66 Hz; power consumption <300 W; standby <5 W Connectors: N-type (m)Key Features Simultaneous noise figure and gain measurements displayed in color graphical format Frequency list mode for targeted measurements and throughput optimization Automatic ENR calibration data upload from SNS Series noise sources Enhanced data analysis via limit lines and marker functions Internal storage for up to 30 state, trace, and setup files Local oscillator control via dedicated second GPIB interface VGA output for external display connectivity PC and printer integration with multi-format data exportTypical Applications Amplifier characterization, transceiver evaluation, frequency translating device analysis, and component qualification across UHF through microwave bands.Compatibility & Integration Fully compatible with SNS Series noise sources (N4000A, N4001A, N4002A) and legacy Agilent 346/347 noise sources. Dual GPIB interfaces enable independent instrument control and local oscillator management for automated test sequences and system integration.

Features & description

From manufacturer datasheet

Features

• Frequency range: 10 MHz to 3.0 GHz • Measurement bandwidths (nominal): 4 MHz, 2 MHz, 1 MHz, 400 kHz, 200 kHz, 100 kHz • Frequency reference aging (std): $\pm < 2$ ppm/year; Opt 1D5: $\pm < 0.1$ ppm/year • Temperature stability (std): $\pm < 6$ ppm; Opt 1D5: $\pm < 0.01$ ppm • Tuning accuracy (4 MHz BW, 10 MHz–3 GHz): $\pm < \text{reference error} + 100 \text{ kHz}$ • NF instrument uncertainty (10 MHz–3 GHz, ENR 4–7 / 12–17 dB): $\pm < 0.05 \text{ dB}$; ENR 20–22 dB: $\pm < 0.1 \text{ dB}$ • NF measurement range vs ENR: 0–20 / 0–30 / 0–35 dB • Gain range: –20 to +40 dB; instrument uncertainty $\pm < 0.17 \text{ dB}$ (typ. conditions) • RF input: Type-N (f), 50 Ω • Max operating input power: –10 dBm (wideband noise power) • Max protected input: $\pm 20 \text{ Vdc}$; +15 dBm peak/avg • Noise source drive: BNC 28.0 V $\pm 0.1 \text{ V}$ on @ $\leq 60 \text{ mA}$ peak; off $< 1 \text{ V}$ • SNS connector for SNS Series sources • Sweep points: 2 to 401 or fixed frequency • Averaging: up to 999 • Speed (nominal, 10 MHz–3 GHz): $< 50 \text{ ms/meas}$ @ 8 avg; $< 42 \text{ ms}$ @ 64 avg • Display: 17 cm color LCD; 2 channels; 4 markers/channel • Interfaces: GPIB; LO GPIB; RS-232; parallel printer; VGA; probe power +15/–12.6 V @ 150 mA • 10 MHz ref out: $> 0 \text{ dBm}$; ref in: –15 to +10 dBm • Power: $< 300 \text{ W}$; size $\sim 222 \times 410 \times 375 \text{ mm}$; weight $\sim 15.5 \text{ kg}$ • Operating temp: 0 °C to +55 °C; cal interval 1 year recommended

Applications

• Amplifier noise figure and gain • Downconverter / upconverter DUT modes with external LO control • System downconverter measurements • SNS Series automatic ENR / Tcold upload

N8973A Characteristics / Specifications

PARAMETER	VALUE
Model	N8973A
Manufacturer	Keysight / Agilent
Instrument Type	Noise Figure Analyzer
Alias	N8973A; Agilent N8973A; Keysight N8973A
Frequency range	10 MHz to 3.0 GHz
RF connector	Type-N (f) 50 Ω
Measurement bandwidths	4/2/1 MHz, 400/200/100 kHz
NF uncertainty 10 MHz	3 GHz: $\pm < 0.05$ dB (ENR 4–17 dB class)
Gain range	–20 to +40 dB; instrument uncertainty $\pm < 0.17$ dB (typ. conditions)
Noise source drive	BNC 28.0 V ± 0.1 V on @ ≤ 60 mA peak; off < 1 V
Weight	15.5 kg
Power consumption	< 300 W Notes Specs from Agilent N8973A/74A/75A NFA Series data sheet. Warm-up 60 min; user cal required for corrected measurements. Confirm Opt 1D5 and serial-prefix RF board revision on the unit.
Measurement bandwidths (nominal)	4 MHz, 2 MHz, 1 MHz, 400 kHz, 200 kHz, 100 kHz
Frequency reference aging (std)	$\pm < 2$ ppm/year; Opt 1D5: $\pm < 0.1$ ppm/year
Temperature stability (std)	$\pm < 6$ ppm; Opt 1D5: $\pm < 0.01$ ppm
Tuning accuracy (4 MHz BW, 10 MHz–3 GHz)	$\pm <$ reference error + 100 kHz
NF instrument uncertainty (10 MHz–3 GHz, ENR 4–7 / 12–17 dB)	$\pm < 0.05$ dB; ENR 20–22 dB: $\pm < 0.1$ dB
NF measurement range vs ENR	0–20 / 0–30 / 0–35 dB
RF input	Type-N (f), 50 Ω
Max operating input power	–10 dBm (wideband noise power)
Max protected input	± 20 Vdc; +15 dBm peak/avg
Sweep points	2 to 401 or fixed frequency

PARAMETER	VALUE
Averaging	up to 999
Speed (nominal, 10 MHz–3 GHz)	<50 ms/meas @ 8 avg; <42 ms @ 64 avg
Display	17 cm color LCD; 2 channels; 4 markers/channel
Interfaces	GPIB; LO GPIB; RS-232; parallel printer; VGA; probe power +15/–12.6 V @ 150 mA
10 MHz ref out	>0 dBm; ref in: –15 to +10 dBm
Power	<300 W; size ~222×410×375 mm; weight ~15.5 kg
Operating temp	0 °C to +55 °C; cal interval 1 year recommended

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	N8973A
Manufacturer	Keysight / Agilent
Instrument Type	Noise Figure Analyzer
Alias	N8973A; Agilent N8973A; Keysight N8973A

Specifications

PARAMETER	VALUE
Frequency range	10 MHz to 3.0 GHz
RF connector	Type-N (f) 50 Ω
Measurement bandwidths	4/2/1 MHz, 400/200/100 kHz

NF uncertainty 10 MHz–3 GHz: ±0.05 dB (ENR 4–17 dB class)

Specifications

PARAMETER	VALUE
Gain range	–20 to +40 dB
Noise source drive	28.0 V ±0.1 V
Weight	15.5 kg
Power consumption	<300 W

Notes

Specs from Agilent N8973A/74A/75A NFA Series data sheet. Warm-up 60 min; user cal required for corrected measurements. Confirm Opt 1D5 and serial-prefix RF board revision on the unit.

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
NAICS 423690 · 811210 · 541380
Generated August 12, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.