

KEYSIGHT TECHNOLOGIES (AGILENT HP)

N8975A

The Keysight (formerly Agilent/HP) N8975A is a high-performance Noise Figure Analyzer designed for fast, accurate, and repeatable noise figure measurements. Covering a frequency range from 10 MHz to 26.5 GHz in a single instrument, it supports simultaneous noise figure and gain characterization of amplifiers and frequency-translating devices. Standard features include an APC 3.5 mm (male) input connector, six user-selectable measurement bandwidths, compatibility with smart SNS Series noise sources, and a dedicated secondary GPIB port for LO control.

SPECIFICATIONS

General

Interfaces	GPIB (Primary), Dedicated LO Control (2nd GPIB), RS-232, Parallel, LAN (10Base-T), VGA
Measurement Technique	Y-factor
Data Storage	Built-in 3.5-inch 1.44 MB floppy disk drive

Physical

Operating Temperature	0 to +55 °C
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Frequency Specifications

Frequency Range	10 MHz - 26.5 GHz
Measurement Bandwidths	6 user-selectable (100 kHz, 200 kHz, 400 kHz, 1 MHz, 2 MHz, 4 MHz)

Noise Figure Measurement

Measurement Capabilities	Simultaneous noise figure and gain measurements
Supported Device Types	Amplifiers and frequency translating devices
Noise Figure Instrument Uncertainty	< 0.05 dB (10 MHz to 3 GHz)

Gain Measurement

Gain Instrument Uncertainty	< 0.17 dB (10 MHz to 3 GHz)
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RF Input Characteristics

Connector Type	APC 3.5 mm (male)
Input Impedance	50 Ω

Noise Source Drive

Compatible Noise Sources	Keysight / Agilent SNS Series
Noise Source Drive Voltage	+28V (pulsed)

Interfaces and Connectivity

LO Control Interface	Dedicated 2nd GPIB
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Performance

Noise Figure Measurement Range	0 to 30 dB
Gain Measurement Range	-20 to +40 dB
Sweep Points	2 to 401 points
ENR Data Entry	Smart Noise Source (SNS) auto-download, floppy disk, manual entry, remote

Inputs & Outputs

Maximum Safe DC Voltage	0 Vdc
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Software & Control

Markers	4 per trace
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TECHNOLOGY

Noise Figure Analysis

APPLICATIONS

RF and Microwave Component Characterization

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.