

KEYSIGHT TECHNOLOGIES (AGILENT HP)

N8973A

The Keysight (Agilent) N8973A is a high-performance Noise Figure Analyzer from the NFA series, designed for fast, accurate, and repeatable measurements. Operating from 10 MHz to 3.0 GHz, it is optimized for characterizing amplifiers and frequency translating devices. It features simultaneous noise figure and gain measurements, six user-selectable measurement bandwidths, and includes a dedicated secondary GPIB interface for direct Local Oscillator (LO) control. It offers seamless integration with Keysight's SNS series noise sources.

SPECIFICATIONS

General

Interfaces	GPIB (Primary), Dedicated 2nd GPIB (LO control)
Display	17.0 cm (6.5 in) TFT color LCD
Removable Data Storage	3.5-inch 1.44 MB floppy disk drive

Physical

Power Supply	90 to 132 Vrms (47 to 440 Hz), 195 to 250 Vrms (47 to 66 Hz)
Operating Temperature	0 to 55 °C

Frequency Specifications

Frequency Range	10 MHz to 3.0 GHz
Measurement Bandwidths	6 user-selectable (100 kHz, 200 kHz, 400 kHz, 1 MHz, 2 MHz, 4 MHz)

System and Measurement Features

Measurement Modes	Simultaneous noise figure and gain
Device Characterization	Amplifiers and frequency translating devices

Noise Source Drive Characteristics

Compatible Noise Sources	SNS series
Noise Source Drive Voltage	+28 V (pulsed)

Amplitude and Input Characteristics

RF Input Connector Type	N-type (f)
RF Input Impedance	50 Ω

Connectivity and Interfaces

LO Control Interface	Dedicated 2nd GPIB
----------------------	--------------------

Performance

Noise Figure Measurement Range	0 to 30 dB
Gain Measurement Range	-20 to +40 dB
Noise Figure Display Resolution	0.01 dB
Gain Display Resolution	0.01 dB

Display & Analysis

Measurement Display Formats	Graph, Table, Meter
-----------------------------	---------------------

Software & Control

Programming Compatibility	SCPI, Agilent 8970B emulation
---------------------------	-------------------------------

Environmental

Storage Temperature	-40 to +70 °C
---------------------	---------------

Measurement

Sweep Points	Up to 401 (user-selectable)
--------------	-----------------------------

APPLICATIONS

Noise Figure and Gain 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.