

KEYSIGHT TECHNOLOGIES (AGILENT HP)

35670A

The Keysight / Agilent 35670A is a versatile FFT dynamic signal analyzer equipped with a built-in source for general spectrum and network analysis, octave, order, and correlation analysis. Designed to be rugged and portable, it is optimized for field work and demanding R&D applications, particularly in troubleshooting noise, vibration, and acoustic (NVH) problems, analyzing rotating machinery, and characterizing control system parameters.

SPECIFICATIONS

General

Interfaces	GPIB (IEEE-488), RS-232, Parallel
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Physical

Operating Temperature	0 to 55 °C
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Input Specifications

Number of Channels	2 (standard) or 4 (with Option 1C2)
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Frequency Specifications

Frequency Range (1 Channel)	Up to 102.4 kHz
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Frequency Range (2 Channels)	Up to 51.2 kHz
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Frequency Range (4 Channels)	Up to 25.6 kHz
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Frequency Resolution	100, 200, 400, 800, and 1600 lines
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Amplitude and Phase Specifications

Dynamic Range	90 dB (130 dB in swept-sine mode)
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Source / Stimulus Specifications

Signal Types	Random, Burst random, Periodic chirp, Burst chirp, Pink noise, Sine, Arbitrary waveform
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Measurement and Analysis Modes

Octave Analysis	Supported (with triggered waterfall display)
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Order Tracking Analysis	Supported (with tachometer input and orbit diagram)
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Data Storage and Memory

Removable Media Type	Built-in 3.5-inch floppy disk
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Inputs

Input Impedance	1 MΩ, shunted by < 100 pF
ADC Resolution	16-bit
Maximum Input Voltage	42 V peak
Anti-Alias Filter	Included (automatically tracks span)

Triggering

Trigger Sources	Free Run, Internal, External, Source, HP-IB
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Signal Source

Source Output Signals	Random, Burst Random, Periodic Chirp, Burst Chirp, Pink Noise, Sine, Arbitrary
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Signal Processing

Window Functions	Hann, Flat Top, Uniform, Force, Exponential
Averaging Types	RMS, RMS Exponential, Vector, Peak Hold

Performance

Real-Time Bandwidth (1 Channel)	25.6 kHz
Real-Time Bandwidth (2 Channels)	12.8 kHz
Real-Time Bandwidth (4 Channels)	6.4 kHz
Frequency Accuracy	±0.003% (30 ppm)

Analysis

Trace Math Operations	Add, subtract, multiply, divide, integrate, differentiate, FFT, IFFT
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Options

Option 1C2	Add 2 channels (4 channels total)
Option 1D0	Computed Order Tracking
Option 1D1	Real-Time Octave Analysis
Option 1D2	Swept Sine Measurement
Option 1D3	Curve Fit and Synthesis
Option 1D4	Arbitrary Waveform Source
Option UK4	Microphone / ICP Sensor Power (4 mA, 24 Vdc nominal)

TECHNOLOGY

Fast Fourier Transform (FFT)

APPLICATIONS

Noise, Vibration, and Acoustic (NVH) Analysis, Rotating Machinery Evaluation, Control Systems 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.