

KEYSIGHT TECHNOLOGIES (AGILENT HP)

4352B

The Keysight (Agilent HP) 4352B VCO/PLL Signal Analyzer is designed for evaluating voltage-controlled oscillators (VCOs) and phase-locked loops (PLLs) in both development and production environments. Operating from 10 MHz to 3 GHz, it functions as a signal analyzer and VCO tester to quickly measure RF power, frequency, tuning sensitivity, phase noise, and transients.

SPECIFICATIONS

General

Interfaces	GPIB, 24-bit parallel digital I/O, Centronics parallel printer port, external monitor output, external trigger, LO IN, external program RUN/CONT
Display	9-inch color CRT
Warm-up time	30 minutes
Recommended calibration cycle	1 year

Physical

Power Supply	90 V to 132 V / 198 V to 264 V, 47 Hz to 66 Hz, 300 VA max
Operating Temperature	10 to 40 °C °C
Dimensions (W×H×D)	426 mm × 235 mm × 512 mm mm
Weight	22 kg kg

Receiver & RF Input

Receiver frequency range	10 MHz to 3 GHz
Receiver input level range	-10 to +20 dBm
Receiver connector type	N-type (female)
RF power input level range	-10 to +20 dBm
RF power measurement resolution	0.01 dB

Phase Noise & Spectrum

Offset frequency range	100 Hz to 10 MHz
Maximum spectrum span	10 MHz
Spectrum resolution bandwidth (RBW)	1 Hz to 3 kHz (in 1, 3 steps)

FM Deviation

FM deviation measurement ranges	2 kHz, 20 kHz, 200 kHz
FM deviation resolution	4 digits

DUT DC Power Supply

DUT DC supply voltage range	0 to +15.5 V
DUT DC supply maximum current	50 mA
DUT DC supply voltage resolution	1 mV
DUT DC supply voltage accuracy	$\pm(0.2\% + 2 \text{ mV})$
DUT DC supply connector	BNC (female)
DC power current measurement range	0 to 50 mA
DUT DC supply voltage setting accuracy	$\pm(0.2\% + 2 \text{ mV})$

Internal 1 kHz Signal Source

Internal signal source frequency	1 kHz
Internal signal source level range	0 to 1 Vrms (open load)
Internal signal source level resolution	1 mVrms
Internal signal source connector type	BNC (female)

Measurement & Sweep

Sweep measurement points (Analyzer mode)	2 to 801 points
Cable loss compensation	Yes (compensates for RF power loss of connecting cable)

Display & Storage

Built-in storage	3.5 inch flexible disk drive
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Interfaces

Digital I/O port	24-bit parallel digital I/O
External LO input port	LO IN
External trigger input	Supported
External program input	RUN/CONT
External monitor output	Supported
Printer compatibility	Centronics interface, HP PCL3 language
GPIB interface	Supported
Keyboard connector	6-pin mini-DIN (front panel)
Printer port	25-pin D-sub (Centronics)

DC Control Voltage Source

Tuning voltage range	-15 V to +35 V
Tuning voltage resolution	1 mV
Tuning voltage maximum current	20 mA

Tuning Voltage Source

Tuning voltage setting accuracy	$\pm(0.05\% + 2 \text{ mV})$
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Frequency Reference

High stability frequency reference (Option 1D5) stability	$\pm 1.3 \times 10^{-7}$ / year
External reference input frequency	10 MHz (± 10 ppm)
Internal reference output frequency	10 MHz
Internal reference output level	≥ 0 dBm (typically +2 dBm)

Measurement Capabilities

Measurement modes	VCO Parameter Measurement (Frequency/Tuning Sensitivity/RF Power/DC Current), Phase Noise, Spectrum Monitor, Frequency Transient
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Storage

Floppy disk drive	3.5-inch, DOS and LIF formats
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Power Requirements

AC line voltage	90 V to 132 V / 198 V to 264 V (automatic selection)
AC line frequency	47 Hz to 66 Hz
Power consumption	≤ 300 VA

Environmental

Operating humidity range	15% to 95% RH (non-condensing)
Storage temperature range	-20 °C to +60 °C
Operating altitude	Up to 4,500 m

TECHNOLOGY

VCO and PLL Signal Analysis

APPLICATIONS

RF Components Evaluation and Production Testing

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