

KEYSIGHT TECHNOLOGIES (AGILENT HP)

DSO80404B

The Keysight Technologies (formerly Agilent) Infiniium DSO80404B is a high-performance 4 GHz, 4-channel digital storage oscilloscope. Designed for advanced signal integrity analysis, it delivers up to 40 GSa/s sample rate and features one of the industry's lowest noise floors and jitter measurement floors. Combined with the InfiniiMax probing system, it offers a complete, high-fidelity measurement solution for high-speed digital designs.

SPECIFICATIONS

General

Interfaces	LAN, GPIB, USB 2.0 (5 ports), RS-232, VGA
Display	12.1 in color XGA TFT LCD, 1024 × 768 pixels, 256-level intensity grading touch screen
Calibration Interval	1 year

Physical

Power Supply	100 - 240 VAC, 47 - 63 Hz, 550 W maximum power consumption
Operating Temperature	5 °C to +40 °C °C
Dimensions (W×H×D)	437 mm × 283 mm × 475 mm mm
Weight	20.4 kg kg

Vertical System

Analog Bandwidth (-3 dB)	4 GHz
Rise Time (10% to 90%)	105 ps
Rise Time (20% to 80%)	75 ps
Input Channels	4
Input Impedance	50 Ω
Input Coupling	DC
Vertical Resolution	8 bits
Maximum Input Voltage	5 Vrms
DC Gain Accuracy	±2.0% of full scale
Input Sensitivity Range	1.5 mV/div to 1 V/div
Noise Floor	188 μV at 5 mV/div
Channel-to-Channel Isolation	40 dB (DC to 1 GHz), 30 dB (1 GHz to 4 GHz)

Horizontal System and Timebase

Timebase Range	5 ps/div to 20 s/div
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Acquisition System

Maximum Real-Time Sample Rate (1 Channel)	40 GSa/s
Maximum Real-Time Sample Rate (2 Channels)	40 GSa/s
Maximum Real-Time Sample Rate (4 Channels)	40 GSa/s

Trigger System

Trigger Sources	Channel 1, Channel 2, Channel 3, Channel 4, Aux, Line
Trigger Level Range	±4 divisions from center screen
Trigger Sensitivity	0.5 div (DC to 2 GHz), 1.0 div (at 4 GHz)
Trigger Modes	Edge, Glitch, Width, Transition, Runt, Timeout, Pattern, State, Window, Setup/Hold, Sequence

Connectivity and I/O Interfaces

Reference Clock Input	10 MHz
Reference Clock Output	10 MHz

Internal Computer System

Operating System	Windows XP Professional
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Environmental and Compliance

Storage Temperature Range	-40 °C to +70 °C
Operating Humidity Range	Up to 95% relative humidity (non-condensing) at +40 °C
Operating Altitude	Up to 4,600 m (15,000 ft)

Ordering Information and Upgrades

Compatible Probing System	InfiniiMax II / InfiniiMax
System Bandwidth with InfiniiMax 1132A Probe	4 GHz

Timebase

Timebase Accuracy	±0.1 ppm (initial), ±0.25 ppm/year (aging)
Timebase Resolution	50 fs

Triggering

Trigger Bandwidth	4 GHz
Trigger Holdoff Range	100 ns to 10 s
Edge Trigger Bandwidth	4 GHz
Auxiliary Trigger Input Impedance	50 Ω
Auxiliary Trigger Maximum Input Voltage	±5 V
Auxiliary Trigger Connector Type	BNC (rear panel)
Trigger Types	Edge, Glitch, Runt, Setup/Hold, Transition, Timeout, Pattern, State, Window, Sequence

Mathematical Functions

Standard Math Functions	Add, Subtract, Multiply, Divide, Integrate, Differentiate, FFT
FFT Frequency Range	DC to 20 GHz (real-time sample rate dependent)

Connectivity

USB Ports	5 × USB 2.0 (2 front, 3 rear)
LAN Port	1 × RJ-45 (10/100/1000Base-T)
GPIB Port	IEEE-488
Video Output	15-pin D-sub (VGA)

Storage

Hard Drive	≥80 GB internal removable hard drive
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Power and Electrical

Power Consumption	550 W maximum
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Display

Display Resolution	1024 × 768 pixels (XGA)
Display Size & Type	10.4-inch (263 mm) diagonal active-matrix color LCD

Signal Analysis

FFT Window Functions	Hanning, Flattop, Rectangular, Blackman-Harris
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Interfaces

LXI Compliance	LXI Class C compliant
Keyboard Port	PS/2 (rear panel)
Mouse Port	PS/2 (rear panel)
Audio Connections	Line In, Line Out, Mic In (3.5 mm jacks on rear panel)

Environmental

Operating Vibration	5 Hz to 500 Hz, 0.3 g (rms)
Non-operating Vibration	5 Hz to 500 Hz, 2.41 g (rms)
Operating Shock	15 g, 11 ms, half-sine pulse
Non-operating Shock	30 g, 11 ms, half-sine pulse

TECHNOLOGY

Digital Storage Oscilloscope

APPLICATIONS

High-Speed Digital Design, Signal Integrity Analysis, Jitter Measurement

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