

KEYSIGHT TECHNOLOGIES (AGILENT HP)

DSO8064A

The Keysight (Agilent) DSO8064A is a high-performance 4-channel digital storage oscilloscope (DSO) in the Infiniium 8000 Series. Featuring a 600 MHz bandwidth, a maximum real-time sample rate of 4 GSa/s, and up to 128 Mpts of MegaZoom deep memory, the DSO8064A offers unmatched acquisition performance and responsive waveform viewing. Running on an open Windows XP Professional operating system with a standard 12.1-inch touch screen, it delivers an extensive suite of application analysis software and support for high-fidelity active probing.

SPECIFICATIONS

General

Interfaces	LAN (10/100Base-T), GPIB (IEEE 488.2), 5 × USB 2.0 (2 front, 3 rear), SVGA video out, PS/2, Parallel port, RS-232
Display	12.1-inch color XGA TFT-LCD with 256-level intensity-graded touch screen
Waveform File Formats	Waveform (.wfm), Text (.csv), Image (.png, .bmp, .jpg, .gif), Setup (.set)

Physical

Power Supply	100 - 240 V AC (±10%) at 47 - 440 Hz, max 440 W
Operating Temperature	5 to 40 °C °C
Dimensions (W×H×D)	425 mm × 216 mm × 432 mm mm
Weight	13.9 kg kg

Vertical System

Analog Bandwidth	600 MHz
Analog Channels	4
Input Impedance	1 M Ω $\pm$ 1% (13 pF) or 50 Ω $\pm$ 1% (selectable)
Input Coupling	DC, AC
Calculated Rise Time	583 ps (10% to 90%)
Vertical Resolution	8 bits ($\geq$ 12 bits with averaging)
Input Sensitivity Range	1 mV/div to 10 V/div (1 M Ω), 1 mV/div to 1 V/div (50 Ω)
Maximum Input Voltage	1 M Ω : $\pm$ 150 V (DC + peak AC); 50 Ω : 5 Vrms
DC Gain Accuracy	$\pm$ 2% of full scale
Hardware Bandwidth Limit	20 MHz
Active Probe Support	InfiniiMax active probes and accessories
Channel-to-Channel Isolation	40 dB (DC to 600 MHz)
Maximum Input Voltage (50 Ω)	5 Vrms
Offset Range (1 mV/div to 50 mV/div)	$\pm$ 2 V
Offset Range (51 mV/div to 250 mV/div)	$\pm$ 25 V
Offset Range (251 mV/div to 1 V/div)	$\pm$ 100 V
Offset Range (1.01 V/div to 10 V/div)	$\pm$ 250 V
Probe Interface	AutoProbe
Input Capacitance	13 pF (at 1 M Ω)

Horizontal System

Real-Time Sample Rate	4 GSa/s (2 channels interleaved), 2 GSa/s (4 channels)
Maximum Record Length	Up to 128 Mpts (interleaved), up to 64 Mpts per channel
Time Base Range	50 ps/div to 20 s/div
Time Base Accuracy	$\pm$ 1 ppm

Acquisition System

Acquisition Modes	Normal, Peak Detect, Averaging, High Resolution, Segmented Memory
Segmented Memory	Supported
Memory Depth Options	8 Mpts/ch (16 Mpts interleaved) with Option 080, 16 Mpts/ch (32 Mpts interleaved) with Option 160, 32 Mpts/ch (64 Mpts interleaved) with Option 320, 64 Mpts/ch (128 Mpts interleaved) with Option 640

Trigger System

Trigger Sources	Channel 1, Channel 2, Channel 3, Channel 4, Line, Auxiliary
Trigger Holdoff Range	100 ns to 10 s
Trigger Coupling	DC, AC, LF Reject, HF Reject, Noise Reject
Serial Protocol Options	I2C, SPI, CAN (decode options)
External Trigger Input Impedance	Selectable: 50 Ω / 1 M Ω
External Trigger Maximum Input Voltage	150 Vrms CAT II, 300 Vrms CAT I (1 M Ω); 5 Vrms (50 Ω)
Auxiliary Trigger Output Level	VOH $\geq$ 2.4 V, VOL $\leq$ 0.4 V into 50 Ω

Waveform Measurements and Analysis

FFT Window Types	Hanning, Flattop, Rectangular, Blackman-Harris
Waveform Math Operators	Add, Subtract, Multiply, Divide, Integrate, Differentiate, FFT, Absolute, Square, Square Root, Log, Exponential, Min, Max
Compliance Software Support	USB, Ethernet

Display and User Interface

Display Type	10.4-inch color TFT-LCD with touchscreen
Display Resolution	XGA (1024 $\times$ 768)
Waveform Display Formats	YT, XY

Embedded Computer System

Operating System	Windows XP Professional
------------------	-------------------------

Connectivity and I/O Interfaces

LAN Port Speed	10/100Base-T
GPIO Interface	IEEE 488.2
USB Ports	5 $\times$ USB 2.0 (2 front, 3 rear)
External Video Output Port	SVGA (15-pin D-sub)
Reference Clock Input	10 MHz
Reference Clock Output	10 MHz

Power and Environmental

Power Supply Voltage Range	100 - 240 V AC ($\pm$ 10%)
Power Supply Frequency Range	47 - 440 Hz
Power Consumption	Max 440 W
Operating Temperature Range	5 $^{\circ}$ C to +40 $^{\circ}$ C
Non-Operating Temperature Range	-40 $^{\circ}$ C to +70 $^{\circ}$ C
Operating Humidity Range	Up to 95% RH (non-condensing) at +40 $^{\circ}$ C
Operating Altitude	Up to 4,600 m (15,000 ft)
Non-Operating Altitude	Up to 15,300 m (50,000 ft)

Interfaces

LXI Compliance	LXI Class C
PS/2 Ports	Two (one keyboard, one mouse)
Parallel Port	One 25-pin D-sub
Serial Port	One 9-pin male RS-232

Compliance & Safety

Safety Standards	IEC 61010-1:2001, EN 61010-1:2001, CAN/CSA-C22.2 No. 61010-1-04, UL 61010-1:2004
EMC Standards	IEC 61326-1:1997+A1:1998+A2:2000, EN 61326-1:1997+A1:1998+A2:2000

Standard Accessories

Standard Probes Included	Four 10073C 10:1 passive probes (500 MHz)
--------------------------	---

Environmental

Operating Vibration	0.3 g (rms), 5 to 500 Hz, 10 min per axis
Non-Operating Vibration	2.41 g (rms), 5 to 500 Hz, 10 min per axis

Measurements

Voltage Measurement Types	Peak-to-Peak, Minimum, Maximum, Average, RMS, Amplitude, Base, Top, Overshoot, Preshoot, Upper, Middle, Lower
Time Measurement Types	Period, Frequency, Positive Width, Negative Width, Duty Cycle, Rise Time, Fall Time, Delay, Phase, Burst Width

Display

Display Size	10.4 in (26.4 cm) diagonal
--------------	----------------------------

TECHNOLOGY

MegaZoom deep memory digital storage oscilloscope (DSO)

APPLICATIONS

General-purpose digital design, serial bus analysis (I2C, SPI, CAN), compliance testing (USB, Ethernet)

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