

**Aumictech**

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Data Sheet

August 13, 2026

KEYSIGHT / AGILENT / HP

Keysight / Agilent / HP E1428A 1 GSa/s VXI Oscilloscope

Agilent E1428A 1 GSa/s VXI Digitizing Oscilloscope 250 MHz 2 Channel The Agilent E1428A isaC-size 1-slot message-based VXI digitizing oscilloscope with two simultaneous 8-bit acquisition channels, 250 MHz bandwidth, and 1 GSa/s maximum sample rate on both channels. Each channel has 8000-point real-time memory. Shared 1 MB RAM supports fast throughput and automatic pulse-parameter measurements. VXI ATE capture of transients; two-channel correlated single-shot events; pulse-parameter production test; modular replacement for benchtop 250 MHz scope in a VXI mainframe. The Agilent E1428A isaC-size 1-slot message-based VXI digitizing oscilloscope with two simultaneous 8-bit acquisition channels, 250 MHz bandwidth, and 1 GSa/s maximum sample rate on both channels. Each channel has 8000-point real-time memory. Shared 1 MB RAM supports fast throughput and automatic pulse-parameter measurements. VXI ATE capture of transients; two-channel correlated single-shot events; pulse-parameter production test; modular replacement for benchtop 250 MHz scope in a VXI mainframe.



MODEL

**Keysight / Agilent /
HP E1428A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

E1428A

LISTING

[https://aumictechlabs.c
om/products/e1428a-2/](https://aumictechlabs.com/products/e1428a-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight E1428A is a single-slot C-size VXIbus oscilloscope module engineered for high-speed signal acquisition in automated test systems. Operating at 1 GSa/s with 8-bit vertical resolution, it captures transient phenomena with superior timing accuracy and configurable memory depth up to 32,768 points per channel. The module integrates dual analog channels with 100 MHz bandwidth, switchable 1 M Ω / 50 Ω input impedance, and five distinct trigger modes: Edge, Pulse Width, Pattern, State, and Line. Its ± 25 ppm timebase accuracy and <100 ps RMS trigger jitter support precision measurement in complex signal environments. VXIplug&play compatible architecture enables rapid integration into existing mainframe systems and software stacks.

Technical Specifications

Digitizer Performance

Sampling rate: 1 GSa/s

Vertical resolution: 8 bits

Vertical accuracy: $\pm 1.5\%$ of full scale (2 mV/div to 5 V/div); $\pm 2.0\%$ of full scale (10 mV/div to 50 mV/div)

Analog bandwidth: 100 MHz (-3 dB)

Input coupling: DC, AC, GND

Input impedance: 1 M Ω || 15 pF or 50 Ω (switchable)

Vertical offset: ± 10 V (1–50 mV/div); ± 50 V (100 mV/div–5 V/div)

Timebase & Triggering

Timebase accuracy: ± 25 ppm

Record length: Selectable up to 32,768 points per channel

Pre-trigger and post-trigger delay: User-configurable

Trigger modes: Edge, Pulse Width, Pattern, State, Line

Trigger level accuracy: $\pm 1\%$ of full scale

Trigger jitter: 60 dB isolation at 100 MHz

Operating temperature: 0°C to +55°C

Storage temperature: -40°C to +75°C

Humidity: 5% to 95% RH (non-condensing)

Key Features

Dual-channel acquisition with high channel isolation

Multiple trigger modes for complex signal conditions

Configurable record depth and pre/post-trigger delay

Selectable input impedance for matched or high-impedance measurement

Standard BNC connectors for analog signals

Typical Applications

High-speed transient capture, automated production test, signal integrity analysis, and real-time monitoring in modular test architectures.

Compatibility & Integration

VXIplug&play compatible. Integrates into standard C-size VXIbus mainframes with native driver support for common VXI control software.

Features & description

From manufacturer datasheet

Features

- Dual 1 GSa/s ADCs so both channels stay at full rate

E1428A Characteristics / Specifications

PARAMETER	VALUE
Model	E1428A
Manufacturer	Agilent / Hewlett Packard / Keysight
Instrument Type	VXI Digitizing Oscilloscope
Alias	E1428A; HP E1428A; Agilent E1428A
Bandwidth Repetitive	DC to 250 MHz (-3 dB)
Bandwidth Single Shot	DC to 250 MHz (-3 dB)
Maximum Sample Rate	1 GSa/s simultaneous on both channels
Record Length Real Time	8000 points
Record Length Repetitive	500 points
Acquisition Inputs	2 simultaneous
External Trigger	1
Vertical Sensitivity	8 mV to 40 V full scale
Vertical Gain Accuracy DC	plus or minus 1.25 percent of full scale
Vertical Resolution	8 bit ADC (plus or minus 0.4 percent); 10 bit with averaging (plus or minus 0.1 percent)
Input Resistance	1 MOhm or 50 ohm selectable
Input Capacitance	7 pF nominal
Input Coupling	AC or DC
Maximum Input 1 MOhm	plus or minus 250 V
Maximum Input 50 Ohm	5 V rms
Offset Range	up to plus or minus 250 V
Offset Accuracy	plus or minus (1 percent of channel offset + 2 percent of full scale)
Timebase Range	10 ns to 50 s full scale
Internal Trigger Jitter	1.75 ns
External Trigger Jitter	2.8 ns
Stored Setups	48

PARAMETER	VALUE
Shared Memory	1 MB
VXI Device Type	message based
VXI Size	C-size 1 slot
Connectors	P1/P2
VXI Buses	ECL trigger bus
BNC Outputs	probe compensation Cal trigger out Notes Figures from Agilent E1428A data sheet. Install incompatible C-size VXI mainframe with adequate cooling. Confirm probe and 50 ohm vs 1 MOhm setting before applying voltage.
Bandwidth	Repetitive: DC to 250 MHz (-3 dB)

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Notes

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Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.