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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight E1429A VXI 20 MSa/s Digitizer

Agilent E1429A 20 MSa/s 2 Channel Digitizer The HP/Agilent E1429A isaC-size, 1-slot, message-based VXI digitizer with two simultaneous channels at 20 MSa/s and 12-bit resolution. OEM configuration tables list A16/A24 addressing, D08/D16/D32 slave transfers, 4096-byte A24 space, and VXIbus Rev 1.4 / SCPI 1992.0 compliance. E1429B adds Local Bus; E1429A/B share operating specifications otherwise. Two-channel transient digitizing, simultaneous sampling acquisition, and VXI ATE waveform capture at 20 MSa/s. The HP/Agilent E1429A isaC-size, 1-slot, message-based VXI digitizer with two simultaneous channels at 20 MSa/s and 12-bit resolution. OEM configuration tables list A16/A24 addressing, D08/D16/D32 slave transfers, 4096-byte A24 space, and VXIbus Rev 1.4 / SCPI 1992.0 compliance. E1429B adds Local Bus; E1429A/B share operating specifications otherwise. Two-channel transient digitizing, simultaneous sampling acquisition, and VXI ATE waveform capture at 20 MSa/s. Message based servant with register programming path



MODEL

**Agilent / Keysight
E1429A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

E1429A

LISTING

<https://aumictechlabs.com/products/e1429a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight E1429A is a C-size, 1-slot VXI digitizer module for high-speed transient signal acquisition. It delivers two analog channels at 12-bit resolution with sampling rates from 0.05 Sa/s to 20 MSa/s, supported by 512 kSa per channel of non-volatile segmentable memory. The module stores up to 128 independent pre- and post-arm data sets, making it ideal for

capturing burst and event-triggered waveforms. Programmable arm and trigger circuits respond to multiple sources - internal timers, external BNC signals, TTL/ECL logic lines, and VXI bus events - with logical OR capability for complex triggering scenarios. Input ranges span 0.1 V to 100 V across three impedance/voltage configurations, with 50 MHz bandwidth at 1 V single-ended and 10 MHz Bessel filtering. The E1429A supports both message-based SCPI commands for system integration and register-based access for high-speed data streaming. Re-arm rates reach 2 MHz in non-segmented mode, enabling rapid sequential captures. VXIplug&play compatibility integrates with Keysight I/O Libraries for automated instrument control and data handling.

Technical Specifications
Sampling Rate: 0.05 Sa/s to 20 MSa/s
Resolution: 12-bit
Channels: 2 analog
Memory: 512 kSa/channel; segmentable; up to 128 pre- and post-arm data sets; non-volatile
Input Ranges: 0.1 V to 1 V (50 Ω /75 Ω); 0.1 V to 100 V (1 M Ω) in 1-2-5 steps
Bandwidth: 50 MHz @ 1 V single-ended; 5 MHz @ 10 V differential (typical)
Bessel Filter: 10 MHz nominal, 2-pole, switchable
SNR: -62 dB typical
Low-Frequency CMRR: 68 dB
Re-arm Rate: Up to 2 MHz (non-segmented)
Form Factor: C-size, 1-slot VXI module
Dimensions: 12 × 10 × 8 in; Weight: 10 lbs

Key Features
Programmable arm sources: internal, faceplate BNC, input voltage level, TTLTRG, ECLTRG, or logical OR of two signals
Trigger sources: internal, VXI read, faceplate BNC, TTLTRG, ECLTRG
Pre-arm capture capability with configurable readings (1, 7, 16, 777, 215, or continuous post-arm)
ECLTRG functions: arm, trigger, and reference (input/output)
TTLTRG functions: trigger and arm (input); ready for trigger (output)
Built-in self-test
Register-based and message-based programming

Typical Applications
Transient event capture and waveform analysis
Multi-segment sequential data acquisition
Triggered RF and analog signal characterization
System integration via VXI mainframe chassis

Compatibility & Integration
VXIplug&play compatible SCPI command set
Keysight I/O Libraries support

E1429A Characteristics / Specifications

PARAMETER	VALUE
Analog Channels	2
Maximum Sample Rate	20 MSa/s
ADC Resolution	12 bits
VXI Device Type	message based servant
Module Size	C
Slots Occupied	1
Connectors	P1 and P2
Addressing Modes	A16/A24
Data Transfer Modes	D08/D16/D32 slave
A24 Size	4096 bytes
Dynamically Configurable	yes
Interrupter	non interrupter / non interrupt handler
VXIbus Revision	1.4
SCPI Revision	1992.0
Default Logical Address	40
Default Servant Area	0
Default Bus Request Level	3
Specification Period	1 year
Operating Temperature	0 to 55 C
Relative Humidity	<=65 percent at 0 to 40 C
Warm Up Time	1 hour
Memory Architecture	equal memory dedicated to each channel
Simultaneous Sampling	both channels sample simultaneously
Local Bus	not present on E1429A; present on E1429B
Transient Input Caution	suppress transients above 800 Vpk externally

PARAMETER	VALUE
Humidity	<=65 percent at 0 to 40 C

E1429A Specifications

PARAMETER	VALUE
Agilent E1429A 20 MSa/s 2 Channel Digitizer	Overview
Applications	Two-channel transient digitizing, simultaneous sampling acquisition, and VXI ATE waveform capture at 20 MSa/s.
Simultaneous dual channel sampling	Message based servant with register programming path
Equal dedicated memory per channel	SCPI 1992.0 command set
Technical Specifications	Analog Channels: 2

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 to 55 C
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Memory Architecture	equal memory dedicated to each channel
Simultaneous Sampling	both channels sample simultaneously
Local Bus	not present on E1429A; present on E1429B
Transient Input Caution	suppress transients above 800 Vpk externally Notes Configuration and environmental numbers from HP E1429A/B user manual. Resolution/rate from OEM product descriptions. Full amplitude accuracy tables are in AppendixAof the E1429A/B manual; confirm installed memory option on the module.

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 otherwise.

Applications

Two-channel transient digitizing, simultaneous sampling acquisition, and VXI ATE waveform capture at 20 MSa/s.

Key Features

Simultaneous dual channel sampling

Message based servant with register programming path

Equal dedicated memory per channel

SCPI 1992.0 command set

Dynamically configurable VXI addressing

Technical Specifications

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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

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
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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.