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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight E1429B

Agilent E1429B 20 MSa/s 2 Channel Digitizer With Local Bus The Agilent/Keysight E1429B is a C-size, 1-slot, message-based VXI 20 MSa/s dual-channel 12-bit digitizer. OEM E1429A/B manuals state E1429A and E1429B share operating specifications except Local Bus, which is present only on E1429B with up to 80 MByte/s interleaved transfers and 524288 readings per channel of memory. Two-channel transient digitizing, real-time Local Bus waveform streaming, and VXI ATE capture at 20 MSa/s. Simultaneous dual channel 20 MSa/s sampling The Agilent/Keysight E1429B is a C-size, 1-slot, message-based VXI 20 MSa/s dual-channel 12-bit digitizer. OEM E1429A/B manuals state E1429A and E1429B share operating specifications except Local Bus, which is present only on E1429B with up to 80 MByte/s interleaved transfers and 524288 readings per channel of memory. Two-channel transient digitizing, real-time Local Bus waveform streaming, and VXI ATE capture at 20 MSa/s. Simultaneous dual channel 20 MSa/s sampling Local Bus real-time and post-capture readout



MODEL

**Agilent / Keysight
E1429B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

E1429B

LISTING

<https://aumictechlabs.com/products/e1429b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight E1429B is a C-size, 1-slot VXI digitizer module engineered for high-speed transient signal acquisition. It delivers 12-bit resolution across dual analog channels at sample rates from 0.05 Sa/s to 20 MSa/s, with segmentable battery-backed memory supporting up to 128 pre- and post-arm data sets per channel. The module implements both message-based and

register-based programming via SCPI commands, while VXI Local Bus connectivity enables higher-speed data transfer compared to the E1429A variant. On-board non-volatile memory preserves captured data through power loss, and built-in self-test capabilities verify attenuators, amplifiers, A/D converters, memory, timebase, and digital circuits at power-up or via the *TST command.

Technical Specifications

Sample Rate: 0.05 Sa/s to 20 MSa/s
Resolution: 12-bit
Channels: Dual analog
Memory Capacity: 512 kSa per channel
Memory Type: Segmentable, battery-backed, non-volatile
Data Sets per Segment: Up to 128 pre- and post-arm configurations
Analog Input Impedance: High impedance differential; single-ended programmable for 50 Ω or 75 Ω

Key Features

VXI Local Bus support for accelerated data transfer over standard VXI data bus
Power-up self-test validates core subsystems
On-board voltage reference for operational verification
SCPI command interface for high-level system control
Message-based and register-based programming models

Typical Applications

Transient signal measurement, multichannel data logging, segmented waveform capture with pre- and post-trigger buffering.

Compatibility & Integration

Integrates into VXI systems via C-size, 1-slot form factor. VXI Local Bus compatible with HP E1430A, E1431A, E1432A, E1485A, and E1488A modules. Supports VXI plug&play frameworks. Requires Agilent VISA and Agilent IO Libraries Suite for system communication and VXI Resource Manager functionality.

E1429B Characteristics / Specifications

PARAMETER	VALUE
Analog Channels	2
Maximum Sample Rate	20 MSa/s
ADC Resolution	12 bits
Memory Size Per Channel	524288 readings (512K)
Local Bus Max Speed Interleaved	80 MByte/s (40 Mreadings/s)
Local Bus Max Speed Single Channel	40 MByte/s (20 Mreadings/s)
VME Readout Class	up to 2 M transfers/s
Nonvolatile Memory Battery Life Nominal	4 years
Battery Shelf Life If Disconnected Nominal	7 years
Memory Partitions	1, 2, 4, 8, 16, 32, 64, or 128 equal sized
ARM Count Partition Range	1 to 128
Specification Period	1 year
Operating Temperature	0 to 55 C
Relative Humidity	<=65 percent at 0 to 40 C
Warm Up Time	1 hour
VXI Device Type	message based servant
Module Size	C
Slots Occupied	1
Connectors	P1 and P2
Weight	1.9 kg
Addressing Modes	A16/A24
Data Transfer Modes	D08/D16/D32 slave
VXIbus Revision	1.4
SCPI Revision	1992.0
Local Bus Modes	Append Generate Off Pipeline per HP VIP

PARAMETER	VALUE
Manufacturer Code	4095 decimal
Model Code	448 decimal
Humidity	<=65 percent at 0 to 40 C

General Specifications & Supplementary Characteristics

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Model Code	448 decimal Notes Memory, Local Bus speeds, environmental, and VXI characteristics from HP E1429A/B user's manual Appendix A. Amplitude accuracy tables are in the same appendix; confirm installed options 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 except Local Bus, which is present only on E1429B with up to 80 MByte/s interleaved transfers and 524288 readings per channel of memory.

Applications

Two-channel transient digitizing, real-time Local Bus waveform streaming, and VXI ATE capture at 20 MSa/s.

Key Features

Simultaneous dual channel 20 MSa/s sampling

Local Bus real-time and post-capture readout

Nonvolatile battery backed acquisition memory

Partitioned pre-arm circular buffers

SCPI 1992.0 message based programming

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

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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.