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Data Sheet
August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight E1437A VXI 20 MSa/s 23-bit Digitizer with Filters and Memory

The Agilent/Keysight E1437A isaC-size, 1-slot VXI ADC with filters and FIFO memory. OEM overview lists 23-bit raw resolution at 20 MSample/s, 50 ohm input, 40 MHz input bandwidth with 8 MHz alias-protected path, programmable digital filters, digital LO, and FIFO memory options. High dynamic range time and frequency domain digitizing, DSP front ends, and multi-module local-bus signal capture in VXI systems. Built in anti alias filters and signal conditioning Programmable digital filters and digital LO Data Modes: block mode or continuous mode Anti Alias Filter: 8 MHz alias protected path Operating Temperature Class: 0 to 55 C VXI instrument class Headline numbers from Agilent E1437A product overview/manual (20 MSa/s, 23-bit, 40 MHz, 50 ohm, 20 mV to 10.24 Vpeak, C-size 1-slot). FIFO option sizes from OEM option lists. Confirm installed FIFO option and calibration constants on the module.

MODEL **Agilent / Keysight E1437A**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **E1437A**	LISTING **https://aumictechlabs.com/products/e1437a-2/**

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight E1437A is a C-size, single-slot VXI digitizer engineered for high-precision signal acquisition and analysis. Operating at 20 MSa/s with 23-bit ADC resolution, it captures complex signal details required for advanced digital signal processing applications. The module delivers spurious-free dynamic range to -110 dBfs, linearity to 110 dBfs, and noise density of -140

dBfs/Hz at full resolution.Technical Specifications Digitizer Performance Resolution: 23-bit raw ADC Sample rate: 20 MSa/s SFDR: Up to -110 dBfs (18 bits effective) Noise density: -140 dBfs/Hz Linearity: Up to 110 dBfs at 20 MSa/s Spurious signal contamination: At least -110 dBfs Real-time distortion correction: Fixed nonlinearities reduced to ≥110 dB below full scale; soft distortion to ≥70 dB below applied carrier level Input and Signal Conditioning Anti-alias filter: 8 MHz Input bandwidth: 8 MHz (filtered), 40 MHz (unfiltered) Digital filters: 24 real-time decimation type Digital local oscillator: Included Analog signal conditioning: Built-in Memory and Data Transfer FIFO memory: 8 MB standard (64 MB optional) VXIbus port transfer rate: 1 MB/s typical Local bus transfer: Up to 60 MB/s burst; 40.96 MB/s continuous Timing and Synchronization Sample clocks: Two standard Internal clock: 20 MHz, 20.48 MHz External reference clock: 20 MHz phase-lockable Flexible triggering and synchronizationKey Features Single-slot C-size VXI module for compact system integration 23-bit resolution with distortion correction for enhanced signal fidelity Dual memory options accommodate varying acquisition duration requirements High-speed local bus enables sustained 40+ MB/s data transfer 24 programmable filters enable in-module signal conditioning and bandwidth optimizationTypical Applications Signal monitoring in digital signal processing workflows Multi-channel data acquisition systems RF and baseband signal analysis Test and measurement environments requiring high-resolution transient captureCompatibility & Integration VXI plug-and-play architecture. Supported on Windows 3.1, Windows 95, Windows NT, Windows 2000, and HP-UX platforms.

E1437A Characteristics / Specifications

PARAMETER	VALUE
Number Of Channels	1
Input Type	50 ohm
Input Bandwidth	40 MHz
Alias Protected Bandwidth	8 MHz
Sample Rate	20 MSa/s
Voltage Range	20 mV to 10.24 V peak
Raw ADC Resolution	23 bits
Data Resolution Selectable	16 or 32 bit output words
VXI Bus Support	VME and Local Bus
VXI Device Type	register/message based
Module Size	C
Slots Occupied	1
FIFO Memory Base	9 MB class FIFO
FIFO Option UFC	16 MB FIFO
FIFO Option ANC	32 MB FIFO
FIFO Option ANE	64 MB FIFO
Digital Filter Stages	24 decimation type filters
Digital LO	included
Output Data Types	real or complex
Data Modes	block mode or continuous mode
Anti Alias Filter	8 MHz alias protected path
Programming	SCPI and VXIplug and play
Operating Temperature Class	0 to 55 C VXI instrument class
Bandwidth	40 MHz
Operating temperature	Class: 0 to 55 C VXI instrument class

E1437A Specifications

PARAMETER	VALUE
Agilent E1437A 20 MSa/s 23 Bit Digitizer	Overview
VME and Local Bus data paths	VXIplug and play programming support
Technical Specifications	Number Of Channels: 1

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
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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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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

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