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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight E1441A Arbitrary Waveform Generator

Agilent E1441A 12 Bit 40 MSa/s Arbitrary Waveform Generator The Agilent/Keysight E1441A is a C-size, 1-slot, message-based VXI arbitrary waveform generator. OEM datasheet 5965-8830E lists 12-bit resolution, 40 MSa/s sample rate, four 16k nonvolatile arbitrary waveforms, 15 MHz sine/square outputs, isolated output, and internal AM/FM/FSK/Burst plus lin/log sweep. Stimulus generation for VXI ATE, arbitrary waveform playback, and modulated/swept source requirements in C-size systems. Built in standard and arbitrary waveforms The Agilent/Keysight E1441A is a C-size, 1-slot, message-based VXI arbitrary waveform generator. OEM datasheet 5965-8830E lists 12-bit resolution, 40 MSa/s sample rate, four 16k nonvolatile arbitrary waveforms, 15 MHz sine/square outputs, isolated output, and internal AM/FM/FSK/Burst plus lin/log sweep. Stimulus generation for VXI ATE, arbitrary waveform playback, and modulated/swept source requirements in C-size systems. Built in standard and arbitrary waveforms Optional high stability timebase and phase lock (Option 001)



MODEL

**Agilent / Keysight
E1441A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

E1441A

LISTING

<https://aumictechlabs.com/products/e1441a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight E1441A is a C-size VXI arbitrary waveform generator employing direct digital synthesis to produce standard and custom waveforms for electronic testing, simulation, and

communication system development. This message-based module delivers isolated output design that minimizes ground loops and common-mode noise, enhancing signal integrity across complex measurement scenarios. The E1441A provides substantial waveform generation capability at lower cost than comparable standalone function generators. Note: This product is obsolete due to non-compliance with EU RoHS directive 2011/65/EU; Keysight continues service and support through its published end-of-life date.

Technical Specifications

Waveform Generation

Arbitrary waveform resolution: 12-bit Maximum sample rate: 40 MSa/s Memory capacity: Up to 16,000 points per waveform; four 16k-deep arbitrary waveforms Waveform point range: 8 to 8,192 points, extendable to 16,000 points

Frequency Performance

Sine/square wave output: 100 μ Hz to 15 MHz Triangle/ramp wave output: 100 μ Hz to 100 kHz Gaussian noise bandwidth: 10 MHz Sine wave flatness <100 kHz: $\pm 1\%$ (0.1 dB) Sine wave flatness 100 kHz–1 MHz: $\pm 1.5\%$ (0.15 dB) Sine wave flatness 1–15 MHz: $\pm 2\%$ (0.2 dB)

Output Specifications

Amplitude into 50 Ω : 50 mVp-p to 10 Vp-p Amplitude into open-circuit load: 100 mVpp to 20 Vpp Output impedance: 50 Ω fixed Amplitude accuracy at 1 kHz: $\pm 1\%$ of specified output Offset range into 50 Ω : ± 5 Vpk AC + DC Isolation voltage to earth ground: 42 Vpk maximum Output protection: Short-circuit protection; ± 15 Vpk overdrive (<1 minute) Setting resolution: 3 digits (amplitude and offset) Output units: Vpp, Vrms, dBm

Built-in Waveforms

Sine, square, triangle, ramp, Gaussian noise, sinc ($\sin(x)/x$), exponential rise/fall, cardiac, DC voltage

Modulation & Sweep

Internal modulation: AM, FM, FSK, burst Sweep types: Linear, logarithmic

Key Features

Message-based VXI architecture for remote command-driven operation Isolated output eliminates ground-loop interference Non-volatile waveform storage Direct digital synthesis for precise frequency control Four independent 16k-point arbitrary waveform slots Optional high-stability timebase (Option 001)

Typical Applications

RF and baseband signal simulation Component and subsystem characterization Communication system development and validation General-purpose function generation in VXI test racks

Compatibility & Integration

Designed as a single C-size VXI slot module, the E1441A integrates into standard VXIbus mainframes supporting message-based instrument control.

E1441A Characteristics / Specifications

PARAMETER	VALUE
Number Of Channels	1
Sample Rate	40 MSa/s
Amplitude Resolution	12 bits including sign
Arbitrary Waveform Length	8 to 16000 points
Nonvolatile Arbitrary Memories	four 16k waveforms
Amplitude Into 50 Ohm	50 mVpp to 10 Vpp
Amplitude Into Open Circuit	100 mVpp to 20 Vpp
Amplitude Accuracy At 1 kHz	plus/minus 1 percent of specified output
Output Impedance	50 ohm fixed
Isolation To Earth	42 Vpk maximum
Sine Frequency Range	100 uHz to 15 MHz
Square Frequency Range	100 uHz to 15 MHz
Triangle Frequency Range	100 uHz to 100 kHz
Ramp Frequency Range	100 uHz to 100 kHz
Gaussian Noise Bandwidth	10 MHz
Frequency Resolution	10 uHz or 10 digits
Frequency Accuracy 1 Year	20 ppm at 18 to 28 C
Square Rise Fall Time	less than 20 ns
Warm Up Time	30 min
VXI Device Type	message based
Module Size	C
Slots Occupied	1
Connectors	P1/P2
Data Transfer Bus	A16 slave only
Watts Per Slot	25

PARAMETER	VALUE
Module Current Plus 5 V IPM	0.5 A
Module Current Plus 12 V IPM	2.5 A
User Configurable Stored States	4
Bandwidth	10 MHz

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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User Configurable Stored States	4

Notes

Values from Keysight/Agilent E1441A datasheet 5965-8830E. Option 001 stability and phase-lock numbers are separate; confirm installed options.

Ordering Information

OPTION	DESCRIPTION
Option 001	stability and phase-lock numbers are separate; confirm installed options.

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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NIST-traceable calibration · SAM registered ·
30-day returns
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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.