

KEYSIGHT TECHNOLOGIES (AGILENT HP)

E1445A

The Keysight (Agilent) E1445A is a high-performance Arbitrary Function Generator designed as a C-size, 1-slot, message-based VXI module. Featuring 13-bit vertical resolution, a maximum sampling rate of 40 MSa/s, and a deep 256 kSa waveform memory, it offers exceptional flexibility for generating standard waveforms (sine, square, triangle, ramp) and complex user-defined arbitrary waveforms. Its advanced sequencing capabilities enable the creation of highly intricate, long waveforms from smaller, reusable segments, making it ideal for automated test environments.

SPECIFICATIONS

General

Interfaces	VXIbus (C-size, message-based)
Warm-up Time	60 minutes

Physical

Power Supply	VXI Backplane (+5 V, +12 V, -12 V, -5.2 V, -2 V)
Operating Temperature	0 °C to +55 °C °C
Dimensions (W×H×D)	30.5 mm × 262 mm × 353 mm mm
Weight	3.2 kg kg
VXI Slots Required	1

Channel Characteristics

Number of Channels	1
Module Type	C-size, 1-slot, message-based VXI

Waveform Generation

Vertical Resolution	13-bit
Maximum Sampling Rate	40 MSa/s
Waveform Segment Memory	256 kSa
Segment Repetitions	Up to 4,096 times (per single sequence memory entry)
Sequence Repetitions	1 to 65,536 times, or continuous
Standard Waveforms	Sine, Square, Triangle, Ramp

Frequency Specifications

Minimum Frequency	0 Hz
Maximum Frequency, Sine Wave	10.7 MHz
Maximum Frequency, Square Wave	10.7 MHz
Maximum Frequency, Triangle Wave	262.144 kHz
Maximum Frequency, Ramp	262.144 kHz

Amplitude and Output Characteristics

Minimum Output Voltage	1.1875 mV
Maximum Output Voltage	10 Vp-p
Output Impedance	50 Ohm / 75 Ohm (selectable)
Flatness	0.2 dB

Modulation, Sweep, and Burst

Sweep Modes	Linear, Logarithmic
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General Specifications

Built-in Self-test	Yes
Direct Register Access	Supported (high-speed registers)

Clock & Frequency Control

Frequency Resolution	0.010 μ Hz
Reference Clock Sources	Internal 42.94967 MHz, External Ref In (1 to 50 MHz), VXI CLK10

Output Characteristics

Output Filters	10 MHz 7-pole Elliptic, 250 kHz 5-pole Bessel, or Bypass
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Phase Control

Phase Offset Range	-360° to +360°
Phase Offset Resolution	0.008°

VXI Characteristics

VXI Card Size	C-size, 1 slot
VXI Device Type	Message-Based (with register access capability)

Memory Options

Waveform Memory Options	256 kWords (standard), 1 MWord (with Option 001)
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Software & Control

SCPI Compliance	Yes
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VXI Power Requirements

+5 V DC Current	3.5 A (max)
+12 V DC Current	0.3 A (max)
+24 V DC Current	0.5 A (max)
-5.2 V DC Current	1.8 A (max)
-2 V DC Current	0.3 A (max)

Environmental

Storage Temperature	-40 °C to +75 °C
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Performance

Square Wave Rise/Fall Time	< 12 ns
Output Coupling	DC

TECHNOLOGY

Arbitrary Waveform / Function Generator

APPLICATIONS

Automated Test Equipment (ATE) & VXI Systems

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.