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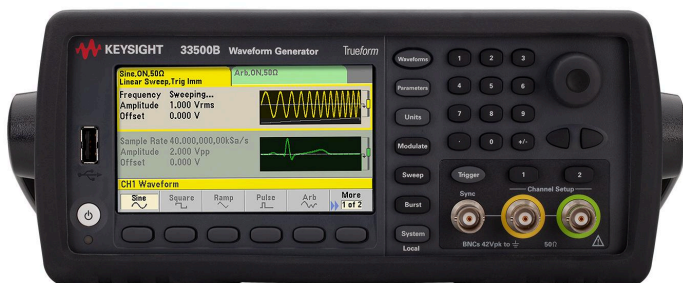
Data Sheet

August 3, 2026

KEYSIGHT

Keysight 33621A 120MHz Waveform Generator

Keysight 33621A 120 MHz Waveform Generator The Keysight 33621A is a single-channel 120 MHz Trueform waveform generator in the 33600A Series. It provides low jitter (~1 ps class), low THD, standard 4 MSa arb memory (64 MSa with Option MEM), and sample rates from 1 μ Sa/s to 1 GSa/s. Precision function/arb generation to 120 MHz; low-jitter clocking; modulation and sequencing for mixed-signal validation. The Keysight 33621A is a single-channel 120 MHz Trueform waveform generator in the 33600A Series. It provides low jitter (~1 ps class), low THD, standard 4 MSa arb memory (64 MSa with Option MEM), and sample rates from 1 μ Sa/s to 1 GSa/s. Precision function/arb generation to 120 MHz; low-jitter clocking; modulation and sequencing for mixed-signal validation.



MODEL

Keysight 33621A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

33621A

LISTING

<https://aumictechlabs.com/products/33621a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight 33621A is a single-channel waveform generator delivering 120 MHz sine wave bandwidth and 1 GSa/s sampling rate. Built on Trueform signal generation technology - which combines Direct Digital Synthesis and point-per-clock architectures - it achieves jitter below 1 ps and 0.03% total harmonic distortion, eliminating measurement artifacts in circuit characterization and validation. Technical Specifications Signal Generation Bandwidth: 120 MHz (sine wave) Sampling Rate: Up to 1 GSa/s Arbitrary Waveform Memory: 4 MSa/channel standard; optional 64 MSa/channel Jitter: <1 ps (200× better than DDS generators) THD: 0.03% (5× better than DDS)

generators) Amplitude Range: 1 mVpp to 10 Vpp (50 Ω); 2 mVpp to 20 Vpp (open circuit)
Amplitude Resolution: 14-bit Waveforms & Modulation Standard Waveforms: Sine, Square, Ramp, Pulse, Triangle, Gaussian Noise, PRBS (PN3–PN32), DC Built-in Arbitrary Waveforms: Cardiac, Exponential Fall/Rise, Gaussian Pulse, Haversine, Lorentz, D-Lorentz, Negative Ramp, Sinc
Modulation: AM, FM, PM, PWM, FSK, BPSK, Sum (carrier + modulation) Pulse Bandwidth: Up to 100 MHz; Rise/Fall Times: 2.9 ns; independently configurable edge times Noise: Band-limited with adjustable bandwidth Sequencing: Arbitrary waveform sequencing supported Physical & Environmental Dimensions: 261.1 mm (W) $\times$ 103.8 mm (H) $\times$ 303.2 mm (D) Weight: 3.5 kg
Operating Temperature: 0°C to 55°C Storage Temperature: –40°C to 70°C Operating Humidity: 80% RH to 40°C, decreasing linearly to 37.5% RH at 55°C (non-condensing)Key Features
Trueform technology: Reduced jitter and harmonic distortion versus traditional DDS 14-bit amplitude resolution (4-digit precision) Pulse generation with independently set leading and trailing edge times Band-limited noise generation with user-adjustable bandwidth Standard PRBS patterns PN3 through PN32Typical Applications Education, research, manufacturing, and design validation requiring high-fidelity signal generation without generator-induced measurement artifacts.Compatibility & Integration Connectivity: LAN (LXI Class C), USB; optional GPIB Front Panel USB: File management Remote Control: Web browser interface to built-in web page
Software: Keysight BenchVue, I/O Library, IVI-COM, VEE, LabVIEW

Features & description

From manufacturer datasheet

Features

- Bandwidth: 120 MHz; 1 channel • Trueform; edge jitter < 1 ps class; THD ~0.03% • Sample rate: 1 μ Sa/s to 1 GSa/s • Arb memory: 4 MSa standard; 64 MSa Option MEM • Options: MEM, OCX, SEC, GPIB

33621A Characteristics / Specifications

PARAMETER	VALUE
Model	33621A
Manufacturer	Keysight Technologies
Instrument Type	Waveform / Arbitrary Waveform Generator (Trueform)
Family	33600A Series
Alias	33621A; Keysight 33621A Bandwidth and Channels
Maximum Frequency	120 MHz
Number of Channels	1
Sample Rate (FS)	1 μSa/s to 1 GSa/s, 1 μSa/s resolution (33621A/22A)
Waveform Length	32 Sa to 4 MSa (64 MSa with Option MEM)
Voltage Resolution (arb)	14 bits
Sequence Steps	512 per channel Signal Fidelity
Edge Jitter	< 1 ps (Trueform literature)
Amplitude Flatness	includes 80–120 MHz bands per 33600A datasheet Modulation AM, FM, PM, FSK, BPSK, PWM, Sum; FM deviation to 60 MHz (33621A/22A) Operational Notes Sibling of 33622A (2-ch 120 MHz). Prefer Keysight 33600A datasheet 5991-3272.
Bandwidth	120 MHz; 1 channel
Sample rate	1 μSa/s to 1 GSa/s
Arb memory	4 MSa standard; 64 MSa Option MEM
Options	MEM, OCX, SEC, GPIB

33621A Specifications

PARAMETER	VALUE
Keysight 33621A 120 MHz Waveform Generator	Overview
Applications	Precision function/arb generation to 120 MHz; low-jitter clocking; modulation and sequencing for mixed-signal validation.
Key Features	- Bandwidth: 120 MHz; 1 channel
Technical Specifications	Model: 33621A
Bandwidth and Channels	Maximum Frequency: 120 MHz
Sample Rate and Memory	Sample Rate (FS): 1 μSa/s to 1 GSa/s, 1 μSa/s resolution (33621A/22A)
Signal Fidelity	Edge Jitter: < 1 ps (Trueform literature)
Modulation	AM, FM, PM, FSK, BPSK, PWM, Sum; FM deviation to 60 MHz (33621A/22A)
Operational Notes	Sibling of 33622A (2-ch 120 MHz). Prefer Keysight 33600A datasheet 5991-3272.

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	
Specifications	
PARAMETER	VALUE
Model	33621A
Manufacturer	Keysight Technologies
Instrument Type	Waveform / Arbitrary Waveform Generator (Trueform)
Family	33600A Series
Alias	33621A; Keysight 33621A
Bandwidth and Channels	
Maximum Frequency: 120 MHz	
Number of Channels: 1	
Sine (VOUT ≤ 4 Vpp): 1 µHz to 120 MHz, 1 µHz resolution	
Sample Rate and Memory	
Specifications	
PARAMETER	VALUE
Sample Rate (FS)	1 µSa/s to 1 GSa/s, 1 µSa/s resolution (33621A/22A)
Waveform Length	32 Sa to 4 MSa (64 MSa with Option MEM)
Voltage Resolution (arb)	14 bits
Sequence Steps	512 per channel
Signal Fidelity	
Edge Jitter: < 1 ps (Trueform literature)	
THD (typ, 20 Hz–20 kHz): 0.03% (1 Vpp) / 0.04% (>1 Vpp)	
Amplitude Flatness: includes 80–120 MHz bands per 33600A datasheet	
Modulation	
AM, FM, PM, FSK, BPSK, PWM, Sum; FM deviation to 60 MHz (33621A/22A)	
Operational Notes	
Sibling of 33622A (2-ch 120 MHz). Prefer Keysight 33600A datasheet 5991-3272.	

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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NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 3, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.