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**Data Sheet**

August 6, 2026

KEYSIGHT / AGILENT

# Keysight (Agilent) 33210A Function / Arbitrary Waveform Generator, 10 MHz

Keysight (Agilent) 33210A Function / Arbitrary Waveform Generator, 10 MHz The Keysight/Agilent 33210A is an entry-level 10 MHz DDS function/arbitrary waveform generator. Sine and square to 10 MHz; ramp/triangle to 100 kHz; pulse to 5 MHz with variable edge. AM, FM, PWM; linear/log sweeps and burst. Amplitude 10 mVpp–10 Vpp into 50  $\Omega$  (20 Vpp open). USB, GPIB, and LAN (LXI-C) standard. Option 002 adds 14-bit, 50 MSa/s, 8K-point arbitrary waveforms. General-purpose function stimulus; education; basic arb (with Opt 002); modulation and sweep tests. The Keysight/Agilent 33210A is an entry-level 10 MHz DDS function/arbitrary waveform generator. Sine and square to 10 MHz; ramp/triangle to 100 kHz; pulse to 5 MHz with variable edge. AM, FM, PWM; linear/log sweeps and burst. Amplitude 10 mVpp–10 Vpp into 50  $\Omega$  (20 Vpp open). USB, GPIB, and LAN (LXI-C) standard. Option 002 adds 14-bit, 50 MSa/s, 8K-point arbitrary waveforms. General-purpose function stimulus; education; basic arb (with Opt 002); modulation and sweep tests.



|                                               |                                                                                                                    |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| MODEL<br><b>Keysight / Agilent<br/>33210A</b> | CALIBRATION<br><b>Available on<br/>request</b>                                                                     |
| CONDITION<br><b>Used</b>                      | STATUS<br><b>In stock</b>                                                                                          |
| RFQ / SKU<br><b>33210A</b>                    | LISTING<br><a href="https://aumictechlabs.com/products/33210a-2/">https://aumictechlabs.com/products/33210a-2/</a> |

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## This unit

The Keysight 33210A is a 10 MHz Function/Arbitrary Waveform Generator employing Direct Digital Synthesis (DDS) technology to deliver stable, low-distortion waveforms across research, design,

and educational applications. It generates standard waveforms - sine, square, ramp, triangle, pulse, noise, and DC - with sine and square outputs reaching 10 MHz, while ramp outputs extend to 100 kHz and pulse waveforms to 5 MHz with programmable edge-time, period, and width control. Noise bandwidth spans 7 MHz. The optional arbitrary waveform capability (Option 002) provides 14-bit resolution at 50 MSa/s sampling rate with 8K point memory, supporting up to four user-defined waveforms in non-volatile storage. Internal modulation includes AM, FM, and PWM modes with external modulation input. Linear and logarithmic sweep functions operate from 1 ms to 500 s, while burst mode allows user-selectable cycle counts per trigger (sine and square waveforms above 3 MHz require infinite burst). Output amplitude ranges from 10 mVpp to 10 Vpp into 50  $\Omega$  nominal impedance, with voltage entry in Vpp, Vrms, dBm, or high/low levels. Harmonic distortion remains low, with spurious output at -75 dBm typical at low amplitude. Frequency resolution reaches 1  $\mu$ Hz against  $\pm 20$  ppm time base accuracy. An intuitive front panel with graphic display, knob, and numeric keypad enables direct parameter adjustment; built-in help accelerates operation. The optional external frequency reference (Option 001) synchronizes to external 10 MHz sources, other 33210A units, or Keysight 33220A/33250A generators with front-panel or computer-controlled phase adjustment. An internal 10 MHz reference output is available for system synchronization.

## Features & description

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From manufacturer datasheet

### Features

- Sine/square: 1 mHz–10 MHz; ramp/triangle: 1 mHz–100 kHz; pulse: 1 mHz–5 MHz • Noise and DC waveforms • Square rise/fall: 20 ns; duty 20–80% (to 5 MHz), 40–60% (to 10 MHz) • Amplitude: 10 mVpp–10 Vpp into 50  $\Omega$  • Frequency accuracy:  $\pm 20$  ppm in 1 year (internal) • THD: 0.04% typ DC–20 kHz; harmonics to –70 dBc class low frequency • Phase noise: –115 dBc/Hz typ at 10 kHz offset • Modulation: AM, FM, PWM; sweep; burst • Option 002 arb: 1 mHz–3 MHz; 2–8K points; 14-bit; 50 MSa/s • Interfaces: USB, GPIB, LAN LXI-C

## 33210A Characteristics / Specifications

| PARAMETER          | VALUE                                                                                                                  |
|--------------------|------------------------------------------------------------------------------------------------------------------------|
| Model              | 33210A                                                                                                                 |
| Manufacturer       | Keysight Technologies (Agilent)                                                                                        |
| Instrument Type    | Function/Arbitrary Waveform Generator                                                                                  |
| Alias              | 33210A; Agilent 33210A Frequency / Amplitude 10 MHz max sine/square; 10 mVpp–10 Vpp into 50 $\Omega$ Operational Notes |
| Sine/square        | 1 mHz–10 MHz; ramp/triangle: 1 mHz–100 kHz; pulse: 1 mHz–5 MHz                                                         |
| Square rise/fall   | 20 ns; duty 20–80% (to 5 MHz), 40–60% (to 10 MHz)                                                                      |
| Amplitude          | 10 mVpp–10 Vpp into 50 $\Omega$                                                                                        |
| Frequency accuracy | $\pm 20$ ppm in 1 year (internal)                                                                                      |
| THD                | 0.04% typ DC–20 kHz; harmonics to –70 dBc class low frequency                                                          |
| Phase noise        | –115 dBc/Hz typ at 10 kHz offset                                                                                       |
| Modulation         | AM, FM, PWM; sweep; burst                                                                                              |
| Option 002 arb     | 1 mHz–3 MHz; 2–8K points; 14-bit; 50 MSa/s                                                                             |
| Interfaces         | USB, GPIB, LAN LXI-C                                                                                                   |

# 33210A Specifications

| PARAMETER                | VALUE                                                                                               |
|--------------------------|-----------------------------------------------------------------------------------------------------|
| Applications             | General-purpose function stimulus; education; basic arb (with Opt 002); modulation and sweep tests. |
| Key Features             | - Sine/square: 1 mHz–10 MHz; ramp/triangle: 1 mHz–100 kHz; pulse: 1 mHz–5 MHz                       |
| Technical Specifications | Model: 33210A                                                                                       |
| Frequency / Amplitude    | 10 MHz max sine/square; 10 mVpp–10 Vpp into 50 Ω                                                    |
| Operational Notes        | Prefer Keysight datasheet 5989-8926. Related: 33220A, 33250A.                                       |

# 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           | 33210A                                |
| Manufacturer    | Keysight Technologies (Agilent)       |
| Instrument Type | Function/Arbitrary Waveform Generator |
| Alias           | 33210A; Agilent 33210A                |

Frequency / Amplitude

10 MHz max sine/square; 10 mVpp-10 Vpp into 50  $\Omega$

Operational Notes

Prefer Keysight datasheet 5989-8926. Related: 33220A, 33250A.

# Ordering Information

| OPTION     | DESCRIPTION                                          |
|------------|------------------------------------------------------|
| Option 002 | adds 14-bit, 50 MSa/s, 8K-point arbitrary waveforms. |

## Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: [sales@aumictech.com](mailto:sales@aumictech.com) · +1 (484) 841-9341

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Generated August 6, 2026

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