

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

INSTEK

Instek GAG-810 Audio Generator

Key Features - 0.02% sine distortion class in 500 Hz to 20 kHz (GAG-810 vs 0.1% on GAG-809)
- Six-step output attenuator 0 to -50 dB - External synchronization input - Dial-scale frequency with range keys - Square-wave output in addition to sine - Discontinued Instek audio-generator line Technical Specifications Model: GAG-810 Manufacturer: GW Instek Instrument Type: Audio generator Series: GAG-809/810 Alias: GAG810 Frequency range: 10 Hz to 1 MHz, 5 ranges Frequency indicator: dial scale Frequency accuracy: $\pm(5\% + 1 \text{ Hz})$ at x10 and x100 ranges Sine output voltage: 5 Vrms (600 ohm load) Frequency response: 10 Hz to 1 MHz $\pm 0.5 \text{ dB}$ at 600 ohm load, referenced to 1 kHz Distortion 500 Hz to 20 kHz: 0.02% or less Distortion 100 Hz to 100 kHz: 0.05% or less (x10 range at 100 Hz; x1k range at 100 kHz) Distortion 50 Hz to 200 kHz: 0.



MODEL

Instek GAG-810

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

GAG-810

LISTING

<https://aumictechlabs.com/products/gag-810-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Instek GAG-810 is a precision audio generator that produces sine and square waveforms across a 10 Hz to 1 MHz frequency range. Engineered for audio equipment testing and troubleshooting, it delivers stable output into standard 600 Ω loads with excellent low-distortion performance and flexible attenuation control. Technical Specifications Waveform Generation Sine wave and square wave outputs Frequency range: 10 Hz to 1 MHz Frequency accuracy: $\pm 5\% + 1 \text{ Hz}$

(at x10, x100 ranges) Dial scale frequency indication Output Performance (Sine Wave) Output voltage: 5 V_{rms} into 600 Ω load; 10 V_{pp} no load Frequency response: 10 Hz to 1 MHz ± 0.5 dB (600 Ω load) Distortion specifications vary by frequency range: $\leq 0.02\%$ (500 Hz–20 kHz), $\leq 0.05\%$ (100 Hz–100 kHz), $\leq 0.3\%$ (50 Hz–200 kHz), $\leq 0.5\%$ (20 Hz–500 kHz), $\leq 1.5\%$ (10 Hz–1 MHz) Output impedance: 600 Ω Square Wave Characteristics Rise and fall time: < 200 ns Overshoot: < 200 ns Duty ratio: 50% $\pm 5\%$ Output Control 6-step attenuator: 0, -10, -20, -30, -40, -50 dB Attenuation accuracy: 1 dB (at 600 Ω load) External Synchronization EXT SYNC input allows phase locking to external signals Synchronizing range: approximately 1% per 1 V_{rms} input Maximum allowable input: 15 V (DC + AC peak) Key Features Compact bench form factor: 130 mm W $\times$ 210 mm H $\times$ 292 mm D; 3 kg Dual-voltage AC operation: 100/120/220/230 V $\pm 10\%$, 50/60 Hz 4 mm banana output terminals for standard test lead compatibility Dedicated SYNC terminal for external frequency synchronization Typical Applications Audio amplifier and speaker testing Filter and equalizer characterization Audio circuit troubleshooting and alignment Frequency response measurement across the audio and ultrasonic spectrum Compatibility & Integration Supplied with user manual, power cord, GTL-103 test lead, and declaration of traceable calibration. Input impedance rated at 150 k Ω .

Features & description

From manufacturer datasheet

Features

- 0.02% sine distortion class in 500 Hz to 20 kHz (GAG-810 vs 0.1% on GAG-809)
- Six-step output attenuator 0 to -50 dB
- External synchronization input
- Dial-scale frequency with range keys
- Square-wave output in addition to sine
- Discontinued Instek audio-generator line

GAG810 Characteristics / Specifications

PARAMETER	VALUE
Model	GAG-810
Manufacturer	GW Instek
Instrument Type	Audio generator
Series	GAG-809/810
Alias	GAG810
Frequency range	10 Hz to 1 MHz, 5 ranges
Frequency indicator	dial scale
Frequency accuracy	$\pm(5\% + 1 \text{ Hz})$ at x10 and x100 ranges
Sine output voltage	5 Vrms (600 ohm load)
Frequency response	10 Hz to 1 MHz $\pm 0.5 \text{ dB}$ at 600 ohm load, referenced to 1 kHz
Distortion 500 Hz to 20 kHz	0.02% or less
Distortion 100 Hz to 100 kHz	0.05% or less (x10 range at 100 Hz; x1k range at 100 kHz)
Distortion 50 Hz to 200 kHz	0.3% or less
Distortion 20 Hz to 500 kHz	0.5% or less
Distortion 10 Hz to 1 MHz	1.5% or less
Square output voltage	10 Vpp or greater (no load)
Square overshoot	2% or less at 1 kHz, max output
Square rise fall	less than 200 ns
Duty ratio	50% $\pm 5\%$
Sync range	$\pm 1\%$ per Vrms
Sync max input	15 V (DC + AC peak)
Sync input impedance	150 kohm
Output impedance	600 ohm
Output attenuator	0, -10, -20, -30, -40, -50 dB (6 ranges)
Attenuator accuracy	$\pm 1 \text{ dB}$ at 600 ohm load

PARAMETER	VALUE
AC power	100/120/220/230 V ±10%, 50/60 Hz
Dimensions	130 mmWx 210 mmHx 292 mmDWeight: approximately 3 kg
Accessories	user manual, power cord, GTL-103 test lead
Spec condition	30 minutes warm-up, +20 C to +30 C

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	GAG-810
Manufacturer	GW Instek
Instrument Type	Audio generator
Series	GAG-809/810
Alias	GAG810
Frequency range	10 Hz to 1 MHz, 5 ranges
Frequency indicator	dial scale
Frequency accuracy	±(5% + 1 Hz) at x10 and x100 ranges
Sine output voltage	5 Vrms (600 ohm load)
Frequency response	10 Hz to 1 MHz ±0.5 dB at 600 ohm load, referenced to 1 kHz
Distortion 500 Hz to 20 kHz	0.02% or less
Distortion 100 Hz to 100 kHz	0.05% or less (x10 range at 100 Hz; x1k range at 100 kHz)
Distortion 50 Hz to 200 kHz	0.3% or less
Distortion 20 Hz to 500 kHz	0.5% or less
Distortion 10 Hz to 1 MHz	1.5% or less
Square output voltage	10 Vpp or greater (no load)
Square overshoot	2% or less at 1 kHz, max output
Square rise fall	less than 200 ns
Duty ratio	50% ±5%
Sync range	±1% per Vrms
Sync max input	15 V (DC + AC peak)
Sync input impedance	150 kohm
Output impedance	600 ohm
Output attenuator	0, -10, -20, -30, -40, -50 dB (6 ranges)
Attenuator accuracy	±1 dB at 600 ohm load
AC power	100/120/220/230 V ±10%, 50/60 Hz

PARAMETER	VALUE
Dimensions	130 mmWx 210 mmHx 292 mmDWeight: approximately 3 kg
Accessories	user manual, power cord, GTL-103 test lead
Spec condition	30 minutes warm-up, +20 C to +30 C

Notes
Specs from GW Instek GAG-809/810 specification sheet. GAG-809 shares the chassis but specifies 0.1% / 0.3% distortion in the same bands. Confirm GAG-810 (0.02%) versus GAG-809 on the faceplate.

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
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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.