

**Aumictech**

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Data Sheet

August 13, 2026

INSTEK

Instek GFG-8215A Function Generator

Key Features - No INT/EXT counter display (that is GFG-8216A and higher) - Separate TTL and CMOS outputs - External voltage-controlled frequency (VCF) - Two-step attenuator plus variable level - Duty-cycle control with signal inversion capability - One GTL-101 lead (versus two on 8216A) Technical Specifications Model: GFG-8215A Manufacturer: GW Instek Instrument Type: Function generator Series: GFG-8200A Alias: GFG8215A Frequency range: 0.3 Hz to 3 MHz, 7 ranges Range accuracy: $\pm 5\%$ + 1 Hz (at 3.0 position); GFG-8215A only Amplitude: greater than 10 Vpp into 50 ohm Output impedance: 50 ohm $\pm 10\%$ Attenuator: -20 dB ± 1 dB x 2 DC offset: less than -5 V to greater than +5 V into 50 ohm Duty control: 80%:20%:80% continuously variable to 1 MHz Display: none (GFG-8215A does not have display) Sine distortion: 1% or less, 0.



MODEL	CALIBRATION
Instek GFG-8215A	Available on request
CONDITION	STATUS
Used	In stock
RFQ / SKU	LISTING
GFG-8215A	https://aumictechlabs.com/products/gfg-8215a-2/

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Instek GFG-8215A is a 3 MHz function generator delivering precision signal generation across seven distinct frequency ranges from 0.3 Hz to 3 MHz. It generates sine, triangle, square, and ramp waveforms with dedicated TTL and CMOS outputs, making it suitable for bench testing, circuit development, and educational laboratory work. The instrument provides greater than 10 Vpp output into 50 Ω loads with adjustable DC offset spanning -5 V to +5 V, dual-stage 20 dB

attenuation, and variable attenuation control. Duty cycle adjustment operates from 20% to 80% with signal inversion capability up to 1 MHz, while external voltage control of frequency (VCF) accepts 0 V to 10 V input at a 100:1 ratio. This model distinguishes itself by omitting built-in display and frequency counter functions. Technical Specifications Signal Generation Waveforms: Sine, Triangle, Square, Ramp, TTL, CMOS Frequency range: 0.3 Hz to 3 MHz (7 ranges) Output amplitude: >10 V_{pp} into 50Ω Output impedance: 50Ω ±10% DC offset: -5 V to +5 V (into 50Ω) Attenuator: Two-step (20 dB × 2) plus variable Duty cycle: 20% to 80% adjustable, up to 1 MHz maximum Waveform flatness: <0.3 dB (0.3 Hz–300 kHz), <0.5 dB (300 kHz–3 MHz) Sine distortion: <2% (0.3 Hz–100 kHz), <5% (100 kHz–3 MHz) Square wave distortion: <5% (0.3 Hz–100 kHz) Triangle distortion: <2% (0.3 Hz–100 kHz) Square wave rise/fall time: ≤25 ns Pulse wave rise/fall time: ≤100 ns External Control VCF input: 0 V to 10 V ±1 V (100:1 modulation ratio) VCF input impedance: 10 kΩ ±10% Physical & Environmental Power: AC 115 V/230 V ±15%, 50/60 Hz Dimensions: 251 mm W × 91 mm H × 291 mm D Weight: 2.0–2.4 kg Operating temperature: 0°C to 40°C Storage temperature: -10°C to 70°C Operating humidity: 80% maximum (non-condensing) Key Features Seven overlapping frequency bands eliminate dead zones Dual output channels: main signal (50Ω) and TTL/CMOS secondary Variable attenuator plus fixed 20 dB stages for precise amplitude control Signal inversion on duty cycle-modulated outputs Low output impedance (50Ω) for direct instrument coupling Typical Applications Circuit verification and troubleshooting across audio to RF frequencies Educational demonstrations of waveform theory and modulation Component testing requiring variable-frequency stimulus Equipment calibration using precision waveform references Compatibility & Integration The 50Ω output impedance enables direct connection to standard test equipment and RF instruments without additional impedance matching. VCF input accommodates external modulation sources for frequency sweep and dynamic control applications. TTL/CMOS outputs interface directly with logic analyzers and digital circuits.

Features & description

From manufacturer datasheet

Features

- No INT/EXT counter display (that is GFG-8216A and higher) • Separate TTL and CMOS outputs • External voltage-controlled frequency (VCF) • Two-step attenuator plus variable level • Duty-cycle control with signal inversion capability • One GTL-101 lead (versus two on 8216A)

GFG8215A Characteristics / Specifications

PARAMETER	VALUE
Model	GFG-8215A
Manufacturer	GW Instek
Instrument Type	Function generator
Series	GFG-8200A
Alias	GFG8215A
Frequency range	0.3 Hz to 3 MHz, 7 ranges
Range accuracy	±5% + 1 Hz (at 3.0 position); GFG-8215A only
Amplitude	greater than 10 Vpp into 50 ohm
Output impedance	50 ohm ±10%
Attenuator	−20 dB ±1 dB x 2
DC offset	less than −5 V to greater than +5 V into 50 ohm
Duty control	80%:20%:80% continuously variable to 1 MHz
Display	none (GFG-8215A does not have display)
Sine distortion	1% or less, 0.3 Hz to 200 kHz
Sine flatness	less than 0.3 dB, 0.3 Hz to 300 kHz; less than 0.5 dB, 300 kHz to 3 MHz
Triangle linearity	98% or greater, 0.3 Hz to 100 kHz; 95% or greater, 100 kHz to 3 MHz
Square symmetry	±2%, 0.3 Hz to 100 kHz
Square rise fall	100 ns or less at maximum output into 50 ohm
CMOS level	4 Vpp ±1 Vpp to 14.5 Vpp ±0.5 Vpp, adjustable
CMOS rise fall	120 ns or less
TTL level	3 Vpp or greater
TTL fan out	20 TTL loads
TTL rise fall	25 ns or less
VCF input voltage	0 V to 10 V ±1 V (100:1)
VCF input impedance	10 kohm ±10%

PARAMETER	VALUE
Frequency counter	not provided
Sweep AM FM	not provided
AC power	115 V / 230 V ±15%, 50/60 Hz
Operating temperature	0 C to 40 C
Relative humidity	80% maximum
Altitude	2000 m indoor
Storage temperature	−10 C to 70 C, 70% RH max
Dimensions	251 mmWx 91 mmHx 291 mmDWeight: approximately 2.0 kg
Accessories	power cord, user manual, GTL-101 × 1
Frequency decade	0.3 Hz to 3 Hz
Frequency decade 1M	300 kHz to 3 MHz
Spec condition	30 minutes warm-up, +20 C to +30 C
Humidity	80% maximum

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	−10 C to 70 C, 70% RH max
Operating temperature	0 C to 40 C
Operating Temperature	0 C to 40 C
Humidity	80% maximum
Relative humidity	80% maximum
Altitude	2000 m indoor
Dimensions	251 mmWx 91 mmHx 291 mmDWeight: approximately 2.0 kg
Accessories	power cord, user manual, GTL-101 × 1
Frequency decade	0.3 Hz to 3 Hz
Frequency decade 1M	300 kHz to 3 MHz
Spec condition	30 minutes warm-up, +20 C to +30 C Notes Specs from GW Instek GFG-8200A series instruction manual, GFG-8215A/8216A/8217A/8219A column. Confirm this is GFG-8215A without counter. Related GFG-8216A adds the 6-digit INT/EXT counter to 150 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.

performance. Unlike 8216A/8217A/8219A, this model has no 6-digit counter display and no sweep/AM/FM.

Applications

Audio and vibration stimulus; TTL/CMOS digital timing; VCF-swept analog control; education and general electronics lab whereabuilt-in counter is not required.

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Technical Specifications

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Output impedance	50 ohm ±10%
Attenuator	-20 dB ±1 dB x 2
DC offset	less than -5 V to greater than +5 V into 50 ohm
Duty control	80%:20%:80% continuously variable to 1 MHz
Display	none (GFG-8215A does not have display)
Sine distortion	1% or less, 0.3 Hz to 200 kHz
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Triangle linearity	98% or greater, 0.3 Hz to 100 kHz; 95% or greater, 100 kHz to 3 MHz
Square symmetry	±2%, 0.3 Hz to 100 kHz
Square rise fall	100 ns or less at maximum output into 50 ohm
CMOS level	4 Vpp ±1 Vpp to 14.5 Vpp ±0.5 Vpp, adjustable

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CMOS rise fall	120 ns or less
TTL level	3 Vpp or greater
TTL fan out	20 TTL loads
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VCF input voltage	0 V to 10 V ± 1 V (100:1)
VCF input impedance	10 kohm $\pm 10\%$
Frequency counter	not provided
Sweep AM FM	not provided
AC power	115 V / 230 V $\pm 15\%$, 50/60 Hz
Operating temperature	0 C to 40 C
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Altitude	2000 m indoor
Storage temperature	-10 C to 70 C, 70% RH max
Dimensions	251 mmWx 91 mmHx 291 mmDWeight: approximately 2.0 kg
Accessories	power cord, user manual, GTL-101 x 1
Frequency decade 1	0.3 Hz to 3 Hz
Frequency decade 1M	300 kHz to 3 MHz
Spec condition	30 minutes warm-up, +20 C to +30 C

Notes

Specs from GW Instek GFG-8200A series instruction manual, GFG-8215A/8216A/8217A/8219A column. Confirm this is GFG-8215A without counter. Related GFG-8216A adds the 6-digit INT/EXT counter to 150 MHz.

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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<https://aumictechlabs.com>

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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.