

# RS PRO IFG8219A Function Generator & Counter 3MHz (Sinewave)

- Waveforms that can be produced by these generators are Sine, square, triangle and ramp
- Built-in 6-digit frequency counter with 150 MHz range (external input)
- TTL and variable CMOS outputs
- External Voltage Controlled Frequency (VCF) Function
- Frequency Range 0.3 Hz  $\rightarrow$  3 MHz and 0.5 Hz  $\rightarrow$  5 MHz offered in this range of function generators.



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## Product Description

From RS PRO, this range of function generators are stable, low distortion instruments that generate signals. These high-quality, user-friendly function generators include a 6 digits LED display that is clear and easy to read and also include a sweep function that simplifies finding resonant points of speakers, filter networks and other networks/structures (an oscilloscope can be connected for response display)

## General Specifications

<b>Series</b>	GFG-8200A Series
<b>Model Number</b>	IFG8219A
<b>Waveform Types</b>	Sine, Triangle, Square, Ramp, TTL and CMOS Output
<b>Display Type</b>	LED display
<b>Frequency Range (Square, Pulse and Arbitrary Waveform)</b>	0.3Hz ~ 3MHz (7 Range)
<b>Time Base Accuracy</b>	±10ppm
<b>Input Impedance</b>	1 (Frequency Counter) MΩ, 1 (VCF) kΩ
<b>TTL Output Level</b>	≥3V Pk-Pk
<b>CMOS Output Level</b>	4V to 14.5V Pk-Pk
<b>Attenuation</b>	-20dB
<b>Digital Frequency</b>	Yes
<b>Digital Amplitude and Offset</b>	Yes
<b>Internal Linear and Log Sweep</b>	Yes
<b>Variable Sweep</b>	Yes
<b>FM Modulation</b>	Yes
<b>Internal and External Amplitude Modulation</b>	Yes
<b>Applications</b>	The integrated functions of these function generators allow these units to accommodate a variety of application use such as: Audio response testing, Ultrasound applications, Vibration testing, Servo system evaluations

## Frequency Characteristics

Signal Type	Range
Sine	0.3Hz - 3MHz
Square	0.3Hz - 3MHz
Ramp (Triangular)	0.3Hz - 3MHz

## Sine Wave Characteristics

Harmonic Distortion	$\leq 1\%$ , 0.3Hz ~ 200kHz
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## Square Wave Characteristics

Rise/Fall Time	$\leq 100\text{ns}$ at maximum output (into 50ohm load)
Symmetry	$\pm 2\%$ , 0.3Hz ~ 100kHz

## Modulation Characteristics

Parameters	AM	FM
Carrier Waveforms	Sine, Square, Triangle	Sine, Square, Triangle
Modulating Frequency	400Hz (INT), DC ~ 1MHz EXT	400Hz(INT), DC ~ 20kHz(EXT)
Depth	0% to 120.0%	-
Deviation	-	0 % - 5%

## Sweep Characteristics

Waveforms	Sine, Square, Triangle
Type	Linear or Logarithmic
Sweep Time	0.5sec. ~ 30sec. adjustable

**Frequency Counter**

<b>Range</b>	0.3Hz ~ 3MHz (5Hz ~ 150MHz EXT)
<b>Accuracy</b>	Time base accuracy 1 count
<b>Time base</b>	±20ppm (23 ±5 ) after 30minutes warm up
<b>Resolution</b>	100nHz for 1Hz, 0.1Hz for 100MHz
<b>Input Impedance</b>	1Mohm / 150pF
<b>Sensitivity</b>	≤35mVrms (5Hz ~ 100MHz), ≤ 45mVrms (100MHz ~ 150MHz)

**Electrical Specifications**

<b>Input Voltage</b>	0V ~ 10V 1V (100 : 1)
<b>Power Consumption</b>	AC115V, 230V 15%, 50 / 60Hz
<b>Plug Type</b>	UK

**Mechanical Specifications**

<b>Dimensions</b>	251mm x 91mm x 291mm
<b>Width</b>	251mm
<b>Length</b>	291mm
<b>Height</b>	91mm
<b>Weight</b>	Approx. 2.2kg

**Operation Environment Specifications**

<b>Operating Temperature Range</b>	0°C to 40°C
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**Approvals**

<b>Compliance/Certifications</b>	CE
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Stock No. :	Model :
123-3554	GFG-8216A (3MHz)
123-3555	GFG-8219A (3MHz)
123-3556	GFG-8255A (5MHz)



GFG-8216A (3MHz)



GFG-8219A (3MHz)



GFG-8255A (5MHz)

## SELECTION GUIDE

MODEL	GFG-8255A	GFG-8219A	GFG-8216A
DISPLAY	6 Digits LED Display		
WAVEFORM	Sing , Square , Triangle		
FREQUENCY RANGE	5MHz	3MHz	3MHz
LIN/LOG SWEEP	✓	✓	
AM/FM MODULATION	✓	✓	
FREQUENCY COUNTER	✓	✓	✓
VOLTAGE CONTROL FREQUENCY	✓	✓	✓
GCV OUTPUT	✓	✓	
TTL/CMOS OUTPUT	✓	✓	✓