PICOTEST®
www.picotest.com.tw

Function/Arbitrary Waveform Generator
G5100A

Leading your technique crossing limit.

- **50 MHz Sine and 25 MHz Square waveforms**
- **14-bit,125 MSa/s, 256 K-point Arbitrary waveform**
- **Pulse, Ramp, Triangle, Noise, and DC waveforms**
- **Linear & logarithmic sweeps and burst operation**
- **AM, FM, PM, FSK, and PWM modulation types**
- **Connect via USB, LAN and GPIB (option)**
- **Graph mode for visual verification of signal settings**

Excellence

PICOTEST G5100A uses direct digital synthesis (DDS) techniques to create a stable, accurate output signal for clean, low distortion sine waves. G5100A offers 10 standard waveforms and user defined arbitrary waveforms with 14bits resolution. It also provides you 16 bits pattern out and a synchronized clock. Moreover, the G5100A external frequency reference lets you synchronize to an external 10 MHz clock.

Ease

Easy to use is important for users. G5100A has intuitive panel operation; the menu is structured and convenient. All shortcut keys are fast and easy to access.

Flexibility

G5100A furnish you the flexibility to create the waveforms you need. Also, you can store up to 8 waveforms (8*64K points) in nonvolatile memory.

Excellence Ease Flexibility

WAVEFORMS

Standard	Sine, Square, Ramp, Pulse , Noise.DC
Built-in arbitrary	Exponential rise, Exponential fall, Negative Ramp, Sin(x)/x, Cardiac

WAVEFORM CHARACTERISTICS

Sine	
Frequency range	1μHz to 50MHz
Square	
Frequency range	1μHz to 25MHz
Variable duty cycle	20% to 80% (to 10MHz) 40% to 60% (to 25MHz)
Ramp Triangle	
Frequency range	1μHz to 200KHz
Pulse	
Frequency range	500μHz to 5MHz
Pulse width(period ≤10s)	20 ns minimum,10 ns resolution
Noise	
Bandwidth	10MHz typical
Arbitrary	
Frequency range	1μHz to 6MHz
Waveform length	256K points (Max)
Amplitude resolution	14 bits (including sign)
Sample rate	125 MSa/s

COMMON CHARACTERISTICS

Amplitude	
Range	10 mVpp to 10Vpp into 50Ω 20 mVpp to 20Vpp into open circuit
DC Offset	
Range (peak AC+ DC)	±5 V into 50Ω ±10 V into open circuit

MODULATION

AM	
Carrier waveforms	Sine, Square, Ramp, Arb
Source	Internal/External
FM	
Carrier waveforms	Sine, Square, Ramp, Arb
Source	Internal/External
PM	
Carrier waveforms	Sine, Square, Ramp, Arb
Source	Internal/External
PWM	
Carrier waveforms	Pulse
Source	Internal/External
FSK	
Carrier waveforms	Sine, Square, Ramp, Arb
Source	Internal/External
External Modulation Input (for AM, FM, PM, PWM)	
Voltage range	±5V full scale
Input impedance	5 KΩ typical
Bandwidth	DC to 20KHz

SWEEP

Waveforms	Sine, Square, Ramp, Arb
Type	Linear or Logarithmic
Direction	Up or Down

BURST

Waveforms	Sine, Square, Ramp, Pulse, Noise, Arb
Type	Counted (1 to 50,000 cycles), Infinite,Gated
Start/Stop Phase	-360° to +360°

INTERFACE

USB,LAN and GPIB (option)

Dimension & Weight	85(H)X210(W)X350(D)mm. Approx.4.08kg

Area Agency

Picotest Crop
www.picotest.com.tw

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