

# DG3000 Series Function/Arbitrary Waveform Generators



## ► Features and Benefits

- The world's first Mixed Signal Generator (MSG) with 16 logic channels and 2 clock channels
- Advanced Direct Digital Synthesis (DDS) Technology, 300 MSa/s maximum sample rate and 120 MHz maximum output frequency, 14 bits vertical resolution, 512 kpts of Waveform Length
- Connectivity: USB Host, USB Device, LAN, GPIB and RS-232
- Connect to RIGOL DS1000 series digital oscilloscopes directly

Model	DG3121A	DG3101A	DG3061A
Maximum Output Frequency	120 MHz	100 MHz	60 MHz
Connectivity	USB Device, LAN, GPIB, RS-232, USB Host		
Option	Logic Signal Output Module		

## ► Specifications

Model	DG3121A	DG3101A	DG3061A
Standard Waveform	Sine, Square, Ramp, Triangle, Pulse, White noise, DC, Index up, Index down, Sinc, Electrocardiogram		
	Frequency characteristics		
Sine	1 $\mu$ Hz ~ 120 MHz	1 $\mu$ Hz ~ 100 MHz	1 $\mu$ Hz ~ 60 MHz
Square	1 $\mu$ Hz ~ 60 MHz	1 $\mu$ Hz ~ 50 MHz	1 $\mu$ Hz ~ 30 MHz
Pulse	500 $\mu$ Hz ~ 30 MHz	500 $\mu$ Hz ~ 25 MHz	500 $\mu$ Hz ~ 20 MHz
Ramp	1 $\mu$ Hz ~ 1 MHz	1 $\mu$ Hz ~ 1 MHz	1 $\mu$ Hz ~ 1 MHz
White Noise	50 MHz bandwidth (-3dB)	40 MHz bandwidth (-3dB)	30 MHz bandwidth (-3dB)

Output Mode	
Burst	Count (1 to 65,536 periods), Infinite, gated
Sweep	Linear or Logarithmic
Amplitude Characteristics	
Amplitude	10 mVpp ~ 10 Vpp (into 50 $\Omega$ ) 20 mVpp ~ 20 Vpp (into open circuit)
Modulate Characteristics	
Mode	AM, FM, PM, FSK, PWM-internal or external
Frequency of Modulation	2 mHz ~ 20 kHz (FSK 2 mHz to 100 kHz)
Arbitrary Waveform Characteristics	
Frequency Range	1 $\mu$ Hz ~ 25 MHz
Waveform Length	2 pts ~ 512 kpts
Amplitude Resolution	14 bits
Sample Rate	300 MSa/s
Arbitrary Waveform Characteristics	
Connectivity	USB Host, USB Device, RS-232, LAN, GPIB
Power Supply	AC, 100-240 V, 45-440 Hz, 50 VA Max

## ► Options and Accessories

With the Logic Signal Output Module, RIGOL DG3000 series is the worldwide first Mixed Signal Generator (MSG) featuring 16 digital data channels and 2 clock channels.



Logic Signal Output Module



10W Power Amplifier PA1011



BNC Cable



RS-232 Cable



50  $\Omega$  Impedance Adaptor



40 dB Attenuator