

Economy Single-Channel Arbitrary Waveform Generator Technical Specifications

To reach these specifications, the instrument must have been operating continuously for more than 30 minutes within the specified operating temperature.

All the specifications are guaranteed unless those marked with “typical”.

Model	AG051	AG1011	AG051F	AG1011F
Bandwidth	5 MHz	10 MHz	5 MHz	10 MHz
Sample Rate	125 MSa/s			
Vertical Resolution	14 bits			
Waveform				
Standard Waveforms	Sine, Square, Ramp, Pulse, and Noise			
Arbitrary Waveforms	Exponential rise, Exponential fall, Sin(x)/x, Staircase, etc. 45 built-in waveforms, User-Definable Waveform			
Frequency Characteristic (Max sampling rate 125 MSa/s; Frequency resolution is 1 μHz)				
Sine	1 μHz—5 MHz	1 μHz—10 MHz	1 μHz—5 MHz	1 μHz—10 MHz
Square	1 μHz—5 MHz	1 μHz—5 MHz	1 μHz—5 MHz	1 μHz—5 MHz
Pulse	1 μHz—5 MHz	1 μHz—5 MHz	1 μHz—5 MHz	1 μHz—5 MHz
Ramp	1 μHz—1 MHz			
White Noise	5 MHz bandwidth (-3 dB) (typical)			
Arbitrary	1 μHz—5 MHz			
Amplitude Characteristic				
Output Amplitude	1 mVPP – 12.5 VPP (50 Ω), 1 mVPP - 25 VPP (High Z)			
Amplitude Resolution	0.1 mVpp or 4 digits			
Amplitude Accuracy	±(1% of setting + 1 mVpp) (Typical value 1kHz Sine, 0V offset)			
DC Offset Range (AC+DC)	±6.25 V (50 Ω), ±12.5 V (High Z)			
DC Offset Resolution	1 mV or 4 digits			
DC Offset Accuracy	±(1 % of setting + 1 mV + amplitude Vpp *0.5%)			
Output Impedance	50 Ω (typical)			
Arbitrary				
Waveform Length	8k points			
Sample Rate	125 MSa/s			
Amplitude Accuracy	14 bits			
Modulation				
Modulation Mode	/	/	AM, FM, PM, FSK, Sweep, and Burst	
Modulation Frequency	/	/	2 mHz to 20 kHz (FSK: 2 mHz to 100 kHz)	
Counter Specification				
Function	/	/	Frequency, period, positive Pulse width, Duty cycle	
Frequency Range	/	/	Single channel: 100 mHz - 200 MHz	
Frequency Resolution	/	/	6 digits	
Input / Output				
Display	4 inch (480 × 320 pixels) TFT LCD			
Type	External Reference Clock Input		Counter Input, External Modulation Input, External Trigger Input, External Reference Clock Input	
Interfaces	USB (type B) connector			
Mechanical Specifications				
Dimension	235 mm × 110 mm × 295 mm (W*H*D)			
Weight	3 kg			



7007020100030