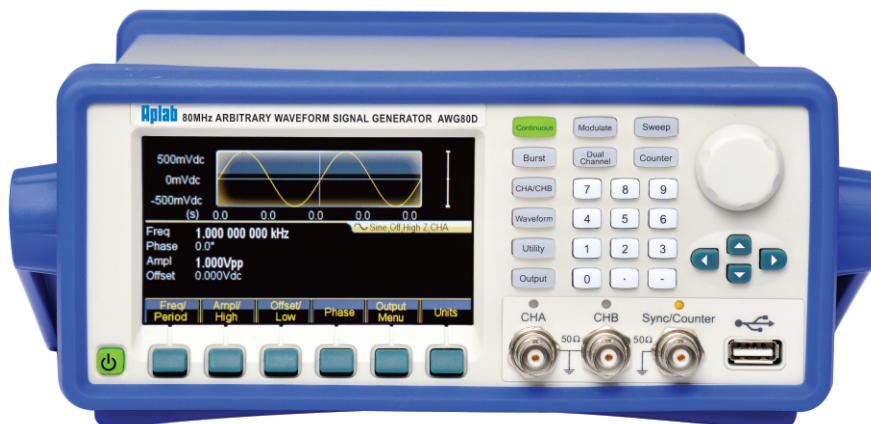


80MHz / 120MHz Arbitrary Waveform Signal Generator



FEATURES

- Dual Channels Outputs with Identical Resolution
- 500 MSa/s Sampling Rate, 14 Bits Vertical Resolution
- 2 ppm High Accuracy to Ensure the High Quality Waveforms
- 150 Kinds of Waveforms
- Full and Complete Modulation Functions
- Build in 350MHz Frequency Counter
- Arbitrary Waveform Edit PC Software
- Standard Interface: USB Host, USB Device and LAN
- 4.3" High resolution TFT LCD Display

TECHNICAL SPECIFICATIONS

Models		AWG80	AWG120
Frequency			
Range	Sine	1μHz ~ 80MHz	1μHz ~ 120MHz.
	Square, Pulse	1μHz ~ 30MHz	1μHz ~ 40MHz.
	Arbitrary	1μHz ~ 30MHz.	
	Ramp	1μHz ~ 5MHz.	
Resolution		1μHz, 12 digits.	
Accuracy		±(2ppm + 1μHz).	
Waveform			
Standard Waveforms		sine, square, ramp, pulse, noise.	
Arbitrary Waveforms		137 kinds of waveforms including PRBS, Exponential, Logarithm, Tangent, Gaussian, Cardiac, Quake and so on.	
Sine Wave Spectrum Purity			
Harmonic Distortion		≤-60dBc (<10MHz). ≤-55dBc (<80MHz). ≤-50dBc (<100MHz). ≤-45dBc (≥100MHz).	
Total Distortion		≤0.1%(20Hz ~ 20kHz, 20Vpp).	
Square, Pulse and Ramp			
Square	Edge Time	≤8ns.	
	Overshoot	≤5%.	
	Duty Cycle	0.1% ~ 99.9% (mini. pos/neg pulsewidth 10ns).	
Pulse	Edge Time	4ns ~ 100μs.	
	Pulse Width	10ns ~ 1000s.	
Ramp	Symmetry	0.0% ~ 100.0%.	
Arbitrary Waveforms			
Arbitrary	Length	6 ~ 1M points.	
	Sampling Rate	1μSa/s ~ 125MSa/s.	

Amplitude		
Range	Frequency $\leq 40\text{MHz}$	2mVpp ~ 20Vpp (open circuit), 1mVpp ~ 10Vpp (50 Ω load).
	Frequency $\leq 80\text{MHz}$	2mVpp ~ 10Vpp (open circuit), 1mVpp ~ 5Vpp (50 Ω load).
	Frequency $\leq 120\text{MHz}$	2mVpp ~ 5Vpp (open circuit), 1mVpp ~ 2.5Vpp (50 Ω load).
	Frequency $> 120\text{MHz}$	2mVpp ~ 4Vpp (open circuit), 1mVpp ~ 2Vpp (50 Ω load).
Resolution		0.1mVpp to 2mVpp.
Accuracy		$\pm(\text{setting value} \times 1\% + 2\text{mVpp})$
Flatness		$\pm 0.2\text{dBm}$, frequency $< 80\text{MHz}$.
(sine, relative to 1MHz)		$\pm 0.3\text{dBm}$, frequency $\geq 80\text{MHz}$.
Offset		
Range		$\pm 10\text{Vpk}$ (ac+dc, open circuit), $\pm 5\text{Vpk}$ (50W load).
Resolution		0.1mV DC to 2mV DC.
Accuracy		$\pm(\text{setting value} \times 1\% + 2\text{mV} + 0.5\% \text{ of amplitude})$
Modulation Output (CHA, CHB)		
FM, AM	Modulation Frequency	1mHz ~ 100kHz (FM, AM, PM, PWM), 1mHz ~ 1MHz (Sum).
PM, PWM	AM Modulating Depth	0% ~ 120%.
Sum Modulation	Phase Deviation	0° ~ 360°.
	Pulse Width Deviation	0% ~ 99%.
	Sum Amplitude	0% ~ 100%.
	Source	Internal, external.
FSK, 4FSK, QFSK, PSK	Hope Frequency	1 μHz ~ maximum frequency.
4PSK, QPSK, ASK, OSK	Hope Rate	1mHz ~ 1MHz.
	Trigger Source	Internal, external.
Sweep Output (CHA, CHB)		
Frequency Sweep	Sweep Time	1ms ~ 500s.
	Return / Hold / Interval Time	0 ~ 500s.
	Sweep Type	Linearity, logarithm.
List Sweep	Duration Time	1ms ~ 500s.
	Retention Time	0s ~ 500s.
Burst Output (CHA, CHB)		
Waveform		Sine, square, sawtooth and so on.
Burst Period		1 μs ~ 500s.
Burst Count		1 ~ 100000000.
Start/End Phase		0° ~ 360°.
Trigger Source		Internal, external, manual.
Channel Coupling		
Frequency Coupling		Frequency Ratio, Frequency Difference.
Amplitude Offset Coupling		Amplitude Difference, Offset Difference.
Waveform Coupling		Combination Amplitude, 0% ~ 100%.
SYNC		
Waveform Characteristics		TTL compatible, edge time $\leq 10\text{nS}$.
Output Impedance		50 Ω nominal.
Modulation and Trigger Input		
Modulation Input Voltage		$\pm 2.5\text{Vpp}$ full scale.
Input impedance		10k Ω nominal.
Counter		
Frequency Measurement		0.1Hz ~ 350MHz, Resolution: 7 digits/s.
Period, Pulse Width Measurement		100ns ~ 20s.
Duty Cycle Measurement		0.1% ~ 99.9%.
General Characteristics		
Power		AC 100 ~ 240V, 45 ~ 65Hz, $< 30\text{VA}$.
Dimension		367 x 256 x 106 mm.
Weight		Approx. 3.7 Kg.
Standard Accessories		
Power Cord		1 No.
BNC Testing Cable		1 No.
CD (Software+ User's Guide)		1 No.

WE PURSUE A POLICY OF CONTINUOUS DEVELOPMENT AND PRODUCT IMPROVEMENT. THUS THE SPECIFICATIONS IN THIS DOCUMENT AND THE LOCATION OF CONTROLS ON THE FRONT PANEL MAY BE CHANGED WITHOUT NOTICE.



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