Function/Arbitrary Waveform Generator

2 Channel,16 Bits,250 MSa/s,64 Million Points, 2.7G Frequency Counter

HDG2000B Series

Feature

- 16 bits resolution, 250MSa/s Sample rate, 2 Channels;
- Channel output isolated from the chassis. 64 Mpts Max. arbitrary waveform Memory Depth.
- 100 MHz, 70 MHz, 50MHz or 30 MHz maximum sine output frequency.
- 2.7G Frequency Counter
- 16 channels digital output, together with the analog channel can rebuild the more mixed signals in daily practice
- Support AM, FM, PM, ASK, FSK, PSK and PWM modulations
- TCXO timebase standard, OCXO optional for ultra-high stability
- 7 inch, 16K true color TFT display, WVGA(800X480)
- Plenty of interfaces: USB Host, USB Device, LAN

Function/Arbitrary Waveform Generator
2 Channel,16 Bits, 250 MSa/s, 64M Million Points, 80M Frequency Counter
HDG2000B Series

Feature

- 16 bits resolution, 250MSa/s Sample rate, 2 Channels;
- 100/80/60/30/20/10/5MHz maximum sine output frequency.
- 16 channels digital output, together with the analog channel can rebuild the more mixed signals in daily practice
- 64M Max. arbitrary waveform Memory Depth, 80M Frequency Counter
- Support AM, FM, PM, ASK, FSK, PSK and PWM modulations

Specification

	Model	HDG2102B	HDG2082B	HDG2062B	HDG2032B	HDG2022B	HDG2012B	HDG2002B
Main Feature	Channel	2	2	2	2	2	2	2
	Waveform Length	64M	64M	64M	64M	64M	64M	64M
	Bandwidth	100MHz	80MHz	60MHz	30MHz	20MHz	10MHz	5MHz
	Frequency	1uHz~100MHz	1uHz~80MHz	1uHz~60MHz	1uHz~30MHz	1uHz~20MHz	1uHz~10MHz	1uHz~5MHz
	Sample Rate	250MSa/s						
	Voltage resolution	16Bit						
	Digital Output Mode	16Channels						
Frequency Characteristics	Waveform	Sine, Square, Ramp, Pulse, Noise, Sinc, Exponential Fall, ECG, Gauss, Haver Sine, Lorentz, Dual-Tone, DC						
	Sine	1uHz~ Max.						
	Square	1uHz – 30MHz	1uHz – 30MHz	1uHz – 30MHz	1uHz~Max.			
	Pulse	1uHz – 15MHz	1uHz – 15MHz	1uHz – 15MHz			1uHz~Max.	
	Ramp	1uHz – 4MHz	1uHz – 3MHz	1uHz – 3MHz	1uHz~3MHz			
	White Noise	100MHz	80MHz	60MHz	30MHz	20MHz	10MHz	5MHz
	Harmonic/ Arbitrary	1uHz – 30MHz	1uHz –25MHz	1uHz –25MHz	1uHz~20MHz	1uHz~20MHz	1uHz~10MHz	1uHz~5MHz
	Resolution	1uHz						
	Accuracy	±2ppm，18℃~28℃						
Square	Rise /Fall time(Typical)	<10ns	<11ns	<12ns	<14ns	<16ns	<18ns	<18ns
	Overshoot	Typical Value（100KHz, 1Vpp）<3%						
	Duty Cycle	≤10MHz: 20.0%~80.0%; 10MHz-40MHz: 40.0%~60.0%; >40MHz: 50.0%（fixed）						
	Non-symmetry	1% of period+5ns						
Ramp	Linearity	≤1%（Typical, 1kHz, 1VPP, Symmetry 100%）						
	Symmetry	0% - 100%						
Pulse	Period	33.33ns ~1millons	40ns–1millons	40ns–1millons	50ns –1millons	50ns–1millons	100ns –1millons	200ns–1millons
	Pulse	≥12ns	≥14ns	≥14ns	≥16ns	≥16ns	≥18ns	≥18ns
	Leading/Trailing Edge Time	≥8ns	≥9ns	≥10ns	≥10ns	≥11ns	≥11ns	≥12ns
	Overshoot	Typical (1Vpp) <3%						
Amplitude Characteristic	Amplitude Range	≤20MHz:1mVpp - 20Vpp; ≤60MHz:1mVpp -15Vpp; ≤80MHz:1mVpp -10Vpp; ≤90MHz:1mVpp - 5Vpp; ≤100MHz:1mVpp - 2Vpp						
	Accuracy	Typical（1kHz Sine, 0V deviation, >10mVpp, Auto）±1% of setting ±2mVpp						
	Resolution	1mv or 4 digits						
	Isolation	<-80dB						
	Impedance	50Ω(Typical)						
Modulation Characteristic	Modulation Type	AM, FM, PM, 2ASK, 2FSK, 2PSK, PWM						
	AM FM PM — Carrier Waveforms	Sine, Square, Ramp, Arb. (except DC)						
	AM FM PM — Source	Internal/External						
	AM FM PM — Modulating Waveforms	Sine, Square, Ramp, Noise, Arb						
	AM FM PM — Frequency	1Hz - 500KHz						
	AM FM PM — Depth	0% -- 120%						
	2ASK 2FSK 2PSK PWM — Carrier Waveforms	Sine, Square, Ramp, Arb. (except DC)						
	2ASK 2FSK 2PSK PWM — Source	Internal/External						
	2ASK 2FSK 2PSK PWM — Modulating Waveforms	Square of 50% duty cycle(PWM:Sine, Square, Ramp, Noise, Arb.)						
	2ASK 2FSK 2PSK PWM — Frequency	1Hz - 500KHz						
Burst Characteristic	Burst Count	2000000000						
	Gated Source	External trigger						
	Trigger Source	Internal, External or Manual						
Sweep Characteristic	Direction	Up						
	Type	linear						
	Sweep/Hold/Return time	280000s						
	Trigger Source	Internal, External, Manual						
	Mark	Falling Edge of Sync signal(programmable)						
General Specifications	Display	7'' 64K Color TFT Display, 800*480 resolution.						
	Weight	3Kg						