

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							
Frequency Characteristics	Voltage resolution	16Bit							
	Digital Output Mode	16Channels							
	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 Resolution	1uHz – 30MHz	1uHz~25MHz	1uHz~25MHz	1uHz~20MHz	1uHz~20MHz	1uHz~10MHz	1uHz~5MHz	
	Accuracy	±2ppm, 18 C~28 C							
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)							
Ramp	Non-symmetry	1% of period+5ns							
	Linearity	≤1% (Typical, 1kHz, 1VPP, Symmetry 100%)							
Pulse	Symmetry	0% - 100%							
	Period	33.33ns~1millions	40ns~1millions	40ns~1millions	50ns~1millions	50ns~1millions	100ns~1millions	200ns~1millions	
	Pulse	≥12ns	≥14ns	≥14ns	≥16ns	≥16ns	≥18ns	≥18ns	
Amplitude Characteristic	Leading/Trailing Edge Time	≥8ns	≥9ns	≥10ns	≥10ns	≥11ns	≥11ns	≥12ns	
	Overshoot	Typical (1Vpp) <3%							
	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							
Modulation Characteristic	Impedance	50Ω(Typical)							
	Modulation Type	AM, FM, PM, 2ASK, 2FSK, 2PSK, PWM							
	Carrier Waveforms	Sine, Square, Ramp, Arb. (except DC)							
	AM Source	Internal/External							
	FM Modulating Waveforms	Sine, Square, Ramp, Noise, Arb							
	PM Frequency	1Hz - 500KHz							
	Depth	0% -- 120%							
	2ASK Carrier Waveforms	Sine, Square, Ramp, Arb. (except DC)							
	2FSK Source	Internal/External							
	2PSK Modulating Waveforms	Square of 50% duty cycle(PWM:Sine, Square, Ramp, Noise, Arb.)							
Burst Characteristic	PWM Frequency	1Hz - 500KHz							
	Burst Count	2000000000							
	Gated Source	External trigger							
Sweep Characteristic	Trigger Source	Internal, External or Manual							
	Direction	Up							
	Type	linear							
General Specifications	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							