

Porównanie parametrów generatorów funkcyjny z serii HDG2000B produkcji Hantek:

Model	HDG2102B	HDG2082B	HDG2062B	HDG2032B	HDG2022B	HDG2012B	HDG2002B
Channel	2	2	2	2	2	2	2
Memory Depth	64M	64M	64M	64M	64M	64M	64M
Frenquency	100MHz	80MHz	60MHz	30MHz	20MHz	10MHz	5MHz
Sample Rate	250MSa/s						
Voltage Resolution	16Bit						
Digital Output	16 Channels output						
Standard Waveforms	Sine, Square, Ramp, Pulse, Noise, Sinc, Exponential Rise, Exponential Fall, ECG, Gauss, Haver Sine, Lorentz, Dual-Tone, DC						
Sine	1uHz~Max.						
Square	1uHz~30MHz				1uHz~Max.		
Pluse	1uHz~15MHz					1uHz~Max.	
Ramp/Triangle	1uHz~4MHz						
White Noise	1uHz~Max.						
Arb.	1uHz~30MHz	1uHz~25MHz	1uHz~20MHz		1uHz~Max.		
Resolution	1uHz						
Accuracy	±2ppm, 18~28°C						
Harmonic Distortion	Typical (0dBm) DC-1MHz: <-60dBc; 1MHz-10MHz: <-55dBc; 10MHz-100MHz: <-50dBc						
Total Harmonic Distortion	<0.1% (10Hz-20kHz, 0dBm)						
Spurious signal (non-harmonic)	Typical(0dBm): ≤10MHz: <-65dBc; >10MHz <-65dBc+6dB/spectrum phase						
Phase Noise	Typical(0dBm,10kHz offset,) 10MHz: ≤-115dBc/Hz						
Rise/Down time	<10ns	<11ns	<12ns	<14ns	<16ns	<18ns	<18ns
Overshoot	<3%(100KHz, 1Vpp)						
Duty Cycle	≤10MHz: 20.0%~80.0%; 10MHz~40MHz: 40.0%~60.0%; >40MHz: 50.0%			8.0%~92.0%			
Non-symmetry	1% of period+5ns						
Jitter (rms)	Typical (1MHz,1Vpp, 50Ω) ≤5MHz: 2ppm+500ps; > 5MHz: 500ps						
Linearity	≤1%(1KHz, 1Vpp)						
Symmetry	0%~100%						
Period	33.33ns~1Ms	40ns~1Ms	40ns~1Ms	50ns~1Ms	50ns~1Ms	100ns~1Ms	200ns~1Ms
Pulse	≥12ns	≥14ns	≥14ns	≥16ns	≥16ns	≥18ns	≥18ns
Leading Edge Time	≥8ns	≥9ns	≥10ns	≥10ns	≥11ns	≥11ns	≥12ns
Overshoot	<3%(1VPP)						
Jitter (rms)	Typical (1MHz, 1Vpp, 50Ω) ≤5MHz 2ppm+500ps > 5MHz 500ps						
Waveform Length	64M Point						
Vertical Resolution	16 Bit						
Sample Rate	250MSa/s						
Rise/Fall time	Typical(1Vpp):<6ns						

Jitter	Typical (1MHz, 1Vpp, 50Ω) ≤5MHz 2ppm+500ps; > 5MHz 500ps
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
Amplitude Flatness	≤10MHz:±0.1dB; ≤60MHz:±0.2dB; ≤100MHz:±0.4dB
Resolution	1mv or 4 digits
Impedance	50Ω
Range	Voffset < Vmax - Vpp/2
Accuracy	±(1% of setting + 5mV + 0.5% of amplitude)
Modulation Type	AM, FM,PM,2ASK,2FSK,2PSK,PWM
Carrier Waveforms	Sine, Square, Ramp, Arb. (except DC)
Source	Internal/External
Modulating Waveforms	Sine, Square, Ramp, Noise, Arb
Frequency	1Hz~500KHz
Depth	0%~120%
Carrier Waveforms	Sine, Square, Ramp, Arb. (except DC)
Source	Internal/External
Modulating Waveforms	Sine, Square, Ramp, Noise, Arb
Frequency	1Hz~500KHz
Frequency Deviation	0~360
Carrier Waveforms	Sine, Square, Ramp, Arb. (except DC)
Source	Internal/External
Modulating Waveforms	Sine, Square, Ramp, Noise, Arb
Frequency	1Hz~500KHz
Frequency Deviation	0%~120%
Carrier Waveforms	Sine, Square, Ramp, Arb. (except DC)
Source	Internal/External
Modulating Waveforms	Square of 50% duty cycle
Code Rate	1Hz~500KHz
Carrier Waveforms	Sine, Square, Ramp, Arb. (except DC)
Source	Internal/External
Modulating Waveforms	Square of 50% duty cycle
Code Rate	1Hz~500KHz
Carrier Waveforms	Sine, Square, Ramp, Arb. (except DC)
Source	Internal/External
Modulating Waveforms	Square of 50% duty cycle
Code Rate	1Hz~500KHz
Carrier Waveforms	Sine, Square, Ramp, Arb. (except DC)
Source	Internal/External

Modulating Waveforms	Sine, Square, Ramp, Noise, Arb.
Code Rate	1Hz~500KHz
Width Deviation	0% to 100% of Pulse Width
Burst Count	1~2000000000
Gated Source	External trigger
Trigger Source	Internal, External or Manual
Type	linear
TypeDirection	Up
Sweep time	280 000s
Hold/Return time	280 000s
Trigger Source	Internal, External, Manual
Mark	Falling Edge of Sync signal(programmable)
Interface	USB host, USB Device, LAN optional
Display	7" 64K Color TFT Display, 800*480
Power Voltage	100-120VACRMS($\pm 10\%$), 45Hz to 440Hz, CAT II ; 120-240VACRMS($\pm 10\%$), 45Hz to 66Hz, CAT II
Power Consumption	<60W
Size	305mm x 100mm x 130mm(L x W x H)
Weight	3KG