



**HDG2000B Series**

16Bit Resolution, 250MSa/s Sample Rate; 64M Memory Depth; 16 channels digital output, 7 inch, 64K true color TFT display, WVGA(800X480)

Model	HDG2102B	HDG2082B	HDG2062B	HDG2032B
<b>Main Features</b>				
Channel	2	2	2	2
Memory Depth	64M	64M	64M	64M
Frequency	100MHz	80MHz	60MHz	30MHz
Sample Rate	250MSa/s			
Voltage Resolution	16Bit			
Digital Output	16 Channels output			
<b>Frequency Characteristic</b>				
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			
Pluse	1uHz~15MHz			
Ramp/Triangle	1uHz~4MHz			
White Noise	1uHz~Max.			
Arb.	1uHz~20MHz	1uHz~20MHz	1uHz~20MHz	1uHz~20MHz
Resolution	1uHz			
Accuracy	±50ppm, 18~28°C			
<b>Sine Wave Spectrum Purity</b>				
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			
Square				
Rise/Down time	<10ns	<11ns	<12ns	<14ns
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			
Ramp				
Linearity	≤1%(1KHz, 1Vpp)			
Symmetry	0%~100%			
Pluse				
Period	33.33ns~1Ms	40ns~1Ms	40ns~1Ms	50ns~1Ms
Pulse	≥12ns	≥14ns	≥14ns	≥16ns
Leading Edge Time	≥8ns	≥9ns	≥10ns	≥10ns
Overshoot	<3%(1VPP)			
Jitter (rms)	Typical (1MHz, 1Vpp, 50Ω) ≤5MHz 2ppm+500ps > 5MHz 500ps			
<b>Arb. Waveform Generator</b>				
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			
<b>Amplitude characteristic</b>				
Amplitude Range	≤20MHz:2mVpp - 20Vpp;≤60MHz:2mVpp -15Vpp;≤80MHz:2mVpp -10Vpp; ≤90MHz:2mVpp - 5Vpp;≤100MHz:2mVpp - 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			
<b>Offset Characteristic</b>				
Range	Voffset  < Vmax - Vpp/2			
Accuracy	±(1% of setting + 5mV + 0.5% of amplitude)			
<b>Modulation Characteristic</b>				
Modulation Type	AM, FM,PM,2ASK,2FSK,2PSK,PWM			
<b>AM</b>				
Carrier Waveforms	Sine, Square, Ramp, Arb. (except DC)			
Source	Internal/External			
Modulating Waveforms	Sine, Square, Ramp, Noise, Arb			
Frequency	1Hz~500KHz			
Depth	0%~120%			
<b>FM</b>				
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			
<b>PM</b>				
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%			
<b>2ASK</b>				
Carrier Waveforms	Sine, Square, Ramp, Arb. (except DC)			
Source	Internal/External			
Modulating Waveforms	Square of 50% duty cycle			
Code Rate	1Hz~500KHz			
<b>2FSK</b>				
Carrier Waveforms	Sine, Square, Ramp, Arb. (except DC)			
Source	Internal/External			
Modulating Waveforms	Square of 50% duty cycle			
Code Rate	1Hz~500KHz			
<b>2PSK</b>				
Carrier Waveforms	Sine, Square, Ramp, Arb. (except DC)			
Source	Internal/External			
Modulating Waveforms	Square of 50% duty cycle			
Code Rate	1Hz~500KHz			
<b>PWM</b>				
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			
<b>Burst Characteristic</b>				
Burst Count	1~200000000			
Gated Source	External trigger			
Trigger Source	Internal, External or Manual			
<b>Sweep Characteristics</b>				
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)			
<b>General Specifications</b>				
Interface	USB host, USB Device, LAN optional			
Display	7" 64K Color TFT Display, 800*480			
Power Voltage	100-120VACRMS(±10%), 45Hz to 440Hz, CATII; 120-240VACRMS(±10%), 45Hz to 66Hz, CATII			
Power Consumption	<60W			
Output Current	0.15A			
Size	305mm x 100mm x 130mm(L x W x H)			
Weight	3KG			