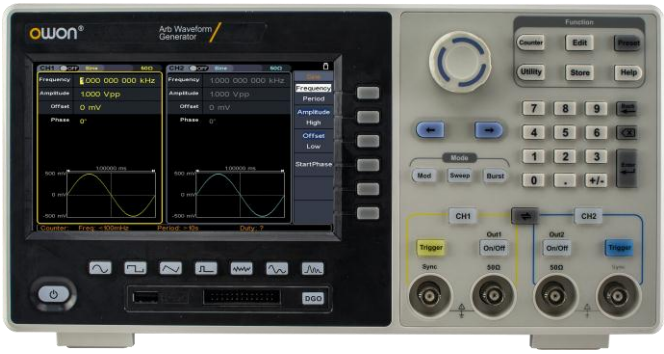
XDG2035 Waveform Generator



+ Max 35MHz frequency output
+ 500MSa/s Sample rate , Vertical resolution 1μHz
+ 14 bits Vertical Resolution , 10Marb waveform length
+ Comprehensive waveform output : 6 basic waveforms, and 150 built-in arbitrary waveforms
+ Comprehensive modulation functions : AM, FM, PM, FSK, 3FSK, 4FSK, PSK, OSK, ASK, BPSK, PWM, Sweep, and Burst
+ High-accuracy frequency counter integrated, supported range 100mHz - 200MHz
+ SCPI, and LabVIEW supported
+ 7 inch (800 × 480 pixels) multi-touch screen, support

+ Performance Specifications

Model	XDG2035
Channel	2
Frequency Output	35MHz
Sample Rate	500MSa/s
Vertical Resolution	14 bits
Waveform	
Standard Waveform	sine, square, pulse, ramp, noise, and harmonic
Arbitrary Waveform	exponential rise, exponential fall, sin(x)/x, step wave, and others, total 150 built-in waveforms, and user-defined arbitrary waveform
Frequency (resolution 1μHz)	
Sine	1μHz-35MHz
Square	1μHz ~ 15MHz
Pulse	1μHz ~ 15MHz
Ramp	1μHz ~ 3MHz
Noise	35MHz (-3dB , typical)
Arbitrary Waveform	1μHz ~15MHz
Harmonic	1μHz ~17.5MHz
Accuracy	±2ppm, 25°C±5°C
Sine Wave Spectrum Purity	
Harmonic Distortion (typical (0dB))	DC ~ 1MHz : <-65dBc 1MHz ~ 10MHz : <-60dBc 10MHz ~ 60MHz : <-55dBc 60MHz ~ 120MHz : <-50dBc
Total Harmonic Distortion	< 0.05 %, 10 Hz to 20 kHz, 1 Vpp
Spurious (non-harmonic) (typical (0dB))	≤10MHz : <-70dBc >10MHz : <-70dBc + 6dB/ octave band
Phase Noise (typical (0 dBm, 10 kHz deviation))	typical (0dBm , 10kHz offset) 1MHz : -110dBc/Hz

Square	
Rise / Fall Time	<8ns
Overshoot	< 3%
Duty Cycle	50.0%（fixed）
Jitter (rms)	≤5MHz:<300ps + 2ppm;>5MHz 300ps
Pulse	
Period	66.667ns~1000000s
Pulse Width	≥18ns
Rise / Fall Time	≧8ns
Overshoot	< 3%
Jitter (rms)	≤5MHz:<300ps + 2ppm;>5MHz 300ps
Duty cycle	0.1%~99.9%
Ramp	
Linearity	≤0.5% of peak output (typical, 1kHz, 1 Vpp, 50% symmetry)
Symmetry	0% ~ 100%
Arbitrary	
Waveform Length	2 points - 10M points
Minimum Rise/Fall Time	<8ns
Jitter (rms)（1MHz,1Vpp,50Ω）	≤5MHz:<300ps + 2ppm; >5MHz 300ps
Amplitude	
into 50Ω load	1mVpp ~ 10Vpp（≤ 25MHz）； 1mVpp ~ 5Vpp （≤60MHz）；
Resolution	0.1mVpp or 4digits，(amplitude > 1Vpp：1mVpp)
DC Offset Range（AD+DC）	±5V(50Ω)、±10V(high resistance)
DC offset resolution	0.1mV or 4digits
Load Impedance	50Ω (typical)
DC offset Accuracy	±(1% of setting + 1 mVpp+ amplitude Vpp * 0.5%)（typical 1kHz sine, 0V offset）
Unit	mVpp，Vpp，Vrms，mVrms，dBm
Modulation	
Type	AM、DSB- AM、FM、PM、ASK、FSK、PSK、BPSK、QPSK、3FSK、4FSK、OSK、PWM、SUM
DSB-AM	
Carrier Waveform	sine, square, ramp
Source	internal / external
Internal Modulation Waveform	sine, square, ramp
AM	
Carrier Waveform	sine, square, ramp, and arbitrary (except DC)
Source	internal / external
Modulating Waveform	sine, square, ramp, noise, and arbitrary
Depth	0.0%~120.0%

Modulating Frequency	2 mHz ~1MHz
FM	
Carrier Waveform	sine, square, ramp, and arbitrary (except DC)
Source	internal / external
Modulating Waveform	sine, square, ramp, noise, and arbitrary
Modulating Frequency	2 mHz ~1MHz
PM	
Carrier Waveform	sine, square, ramp, and arbitrary (except DC)
Source	internal / external
Modulating Waveform	sine, square, ramp, noise, and arbitrary
Phase Deviation	0° - 180°
Modulating Frequency	2 mHz - 1MHz
ASK	
Carrier Waveform	sine, square, ramp, and arbitrary (except DC)
Source	internal / external
Modulating Waveform	square with 50% duty cycle
Key Frequency	2 mHz - 1MHz
FSK/3FSK/4FSK	
Carrier Waveform	sine, square, ramp, and arbitrary (except DC)
Source	internal
Modulating Waveform	square with 50% duty cycle
Key Frequency	2 mHz - 1MHz
PSK	
Carrier Waveform	sine, square, ramp, and arbitrary (except DC)
Source	internal / external
Modulating Waveform	square with 50% duty cycle
Key Frequency	2 mHz - 1MHz
BPSK	
Carrier Waveform	sine, square, ramp, and arbitrary (except DC)
Source	internal
Modulating Waveform	square with 50% duty cycle
Key Frequency	2 mHz - 1MHz
OSK	
Carrier Waveform	sine, square, ramp, and arbitrary (except DC)
Source	internal
Oscillation Time	square with 50% duty cycle
Key Frequency	2 mHz - 1MHz
Concussion time	8ns - 249.75s
SUM (Dual tone)	
Carrier Waveform	sine, square, ramp
Source	internal / external
Internal Modulation Waveform	sine, square, ramp，white noise, arbitrary waveform
Internal am frequency	2mHz~1MHz
Depth	0.0%~100.0%

PWM	
Carrier Waveform	pulse
Source	internal / external
Modulating Waveform	sine, square, ramp, noise, and arbitrary
Width Deviation	0~99%
Modulating Frequency	2 mHz ~ 1MHz
Deviation	0~min
Pulse train responses	
Carrier	Sine，Square，Harmonic，Pulse,Noise and Arbitrary Waveform
Carrier frequency	2mHz ~ BW/2
Type	count (1 to 1000000 cycles), unlimited, gated
Internal cycle	20 ns ~ 500 s
Gated Source	external trigger
Sweep characteristic	
carrier	sine, square, ramp, and arbitrary (except DC)
Maximum / termination frequency	sine: 35MHz square: 15MHz ramp: 3MHz arbitrary:15MHz（Built-in）or 25MHz（User defined）
Type	linear, logarithmic, step
Direction	up / down
Scanning time	1 ms to 500 s ± 0.1%
Trigger source	Internal, external, manual
Frequency Counter	
Function	Frequency， period, +width, -width, +duty, and -duty
Frequency Range	100mHz ~ 200MHz
Frequency Resolution	7 digits
Coupling mode	AC,DC
Input / Output	
Display	7” 800 x 480 pixels touch screen LCD
Input mode	frequency counter, external modulation input, external trigger input, Internal clock output, external reference clock input / output
Communication Interface	USB Host, USB Device,LAN，COM
Mechanical specifications	
Size	340mm x 177mm x 90mm
Weight	2.3kg

Specifications subject to change without prior notice

+ Accessories

The accessories subject to final delivery.


Power Cord


CD Rom

Manual


USB Cable


Q9 Cable