

FUNCTION/ARBITRARY WAVEFORM GENERATOR

SIGLENT TECHNOLOGIES PRODUCT CATALOG



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SDG7000A Arbitrary Waveform Generator





Key Features

- Dual channel differential/single-ended output, 16-bit LVDS/LVTTL digital bus output
- High-performance sampling system with 5GSa/s sample rate and 14-bit vertical resolution
- 1 GHz maximum bandwidth
- Generates arbitrary waveform with sample rates of 0.01 Sa/s ~ 2.5 GSa/s, with maximum memory depth of 512 Mpts, and provides segment editing /playback functions
- Generates vector signals with up to 500 MS/s symbol rate
- Generates low jitter pulses with 1 ns minimum pulse width and 500ps minimum edge
- Up to 1 GHz bandwidth White Gaussian Noise and the bandwidth is adjustable
- Supports PRBS up to 312.5 Mbps
- The digital bus can output digital signals up to 1 Gbps
- Supports analog/digital modulation, sweeping and bursting
- Enhanced dual channel operation functions: inter channel tracking, coupling and copying; Dual channel superposition function; Supports mutual modulation between channels
- The 24 Vpp analog output is superimposed with ± 12 Vdc offset to provide a maximum output range of ± 24 V (48 V)
- High precision Frequency Counter
- 5-inch capacitive touch screen with resolution of 800x480; Supports external mouse and keyboard operation; Supports WebServer to control the instruments remotely
- Supports multiple interfaces: 10MHz In, 10MHz Out, Trigger In/Out, Markers etc
- Supports SCPI command for easy integration into test systems

Waveform Generator

Characteristics

- Wide Range Amplitude Output



24Vpp analog output superimposed with ± 12 Vdc offset, providing a maximum output range of ± 24 V (48 V).

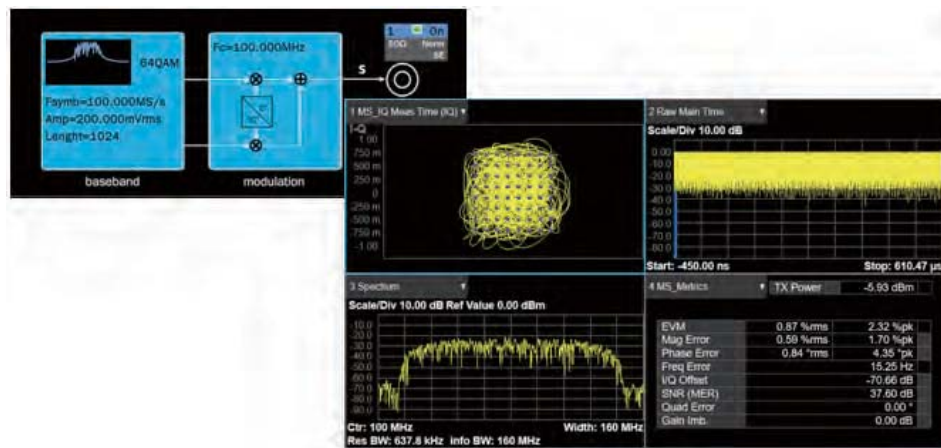
- High-Speed Low Jitter Pulse



Low jitter

When a Square/Pulse waveform is generated by traditional DDS, there can be additional jitter if the sample rate is not an integer-related multiple of the output frequency. EasyPulse technology successfully overcomes this weakness in DDS designs and helps to produce low jitter Square/Pulse waveforms.

- Vector Signal Output (Optional)



The SDG7000A can generate common modulation types of IQ signals, such as ASK, FSK, PSK, QAM. With the innovative resampling technology, excellent EVM performance can be obtained at any symbol rate between 250 S/s ~ 500 MS/s. The built-in digital quadrature modulator can modulate the carrier of the IQ signal to any frequency between 0 Hz~1 GHz. The EasyIQ software can be used to generate and edit various types of IQ signals.



- SigIQPro Signal Generation Software (Optional)

SigIQPro is a flexible PC-based signal generation software that takes signal generation to a whole new level, making it easy to generate complex signals that are fully compliant with Bluetooth, IoT and other communication standards. SIGLENT instruments and SigIQPro signal generation software integrate simulation, design and test to easily meet the needs of users at all stages of design, R&D, and production.

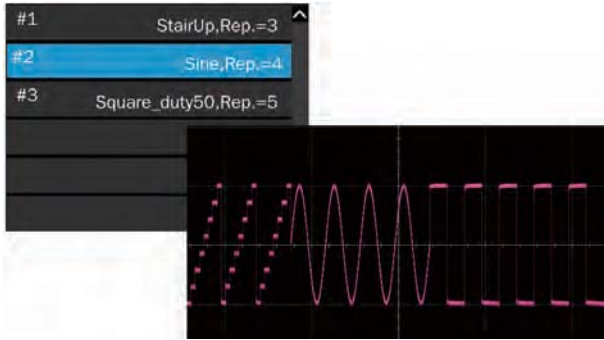
- Excellent Arbitrary Waveform Generation

AFG mode

uses traditional DDS technology to generate arbitrary waveforms

AWG mode

uses the innovative TrueArb technology, with an adjustable sample rate from 0.01 Sa/s~ 2.5 GSa/s and jitter less than 20 ps. It not only has all the advantages of traditional DDS technology, but also overcomes its intrinsic jitter and distortion defects. The flexible platform also provides zero order hold, linear and sinc interpolation methods for increased flexibility when creating complex waveforms.



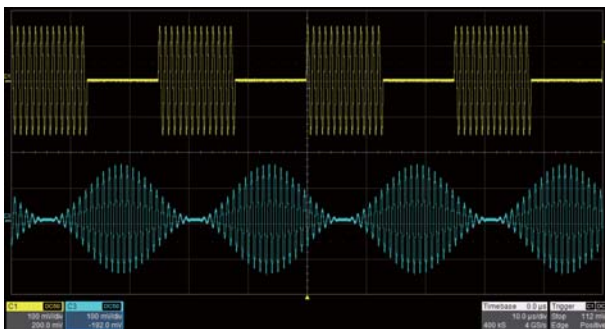
Sequence editing and playback

The SDG7000A supports up to 1024 arbitrary wave segments, each of which can be set with a maximum of 65535 repetitions. When switching between segments, the output seamlessly moves from the last point of the previous segment to the first point of the next segment without generating an idle level. It is suitable for applications with high requirements for waveform switching.

EasyWaveX

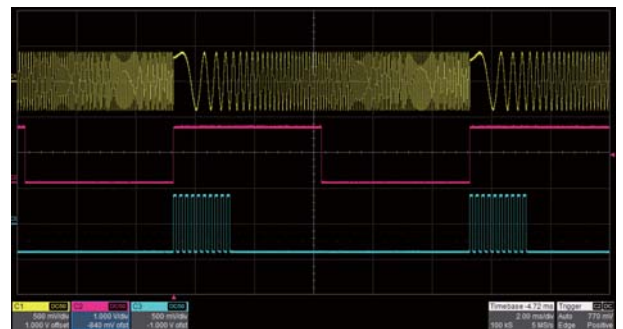
supports extensive arbitrary wave editing functions including manual, linear, coordinate, and equation drawing that facilitate rapid generation of the required waveforms. The EasyWaveX editing software is embedded in the SDG7000A, and can also be installed in a computer, interacting with the SDG7000A over USB or LAN interfaces.

- Complex Signal Generator



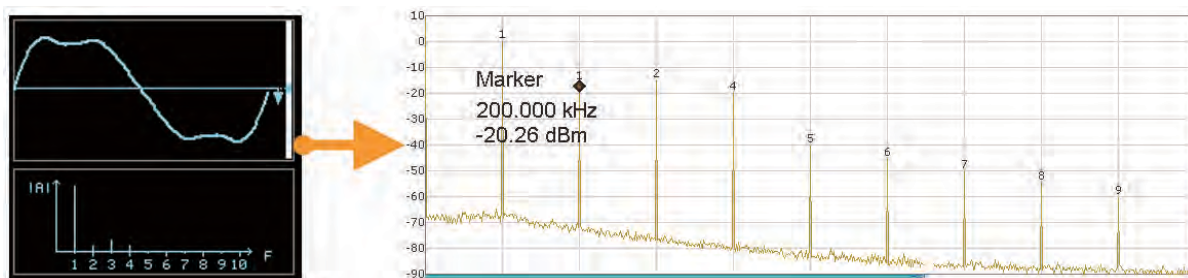
Modulation

A variety of analog and digital modulation modes such as AM, FM, PM, FSK, ASK, PSK, DSB-SC, and PWM are supported. There are three modulation sources: Internal, External, and Channel.



Sweep and Burst

Sweep supports "Line" and "Log" modes, while Burst enables "NCycle" and "Gated" modes. Both Sweep and Burst support trigger sources: Internal, External, and Manual.

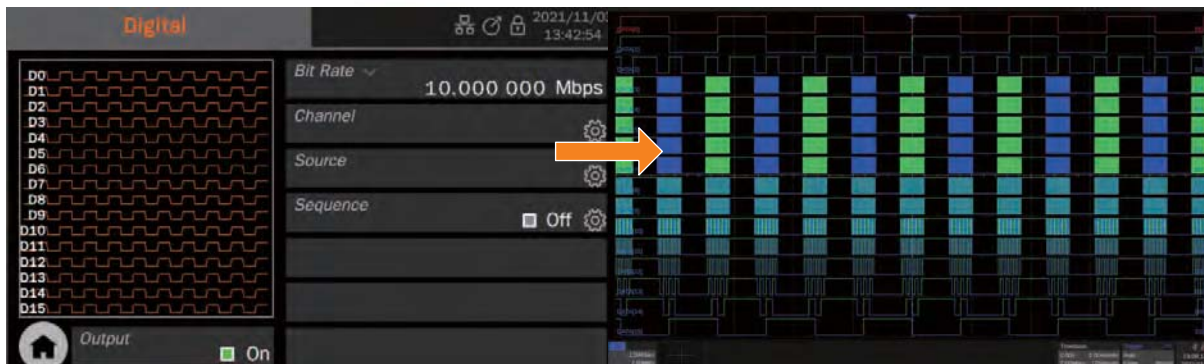


Harmonics Function

provides the ability to add higher-order elements to your signal.

Waveform Generator

- 16 Channel Digital Output (Optional)



Purchase the corresponding digital bus kit to get 16-channel LVTTTL or LVDS output with a bit rate of 1 μ bps ~ 1 Gbps. Combine the digital bus with the analog channels to realize mixed-signal outputs.

- Enhanced Dual Channel Functionality

Two Dual-Channel Operation Mode



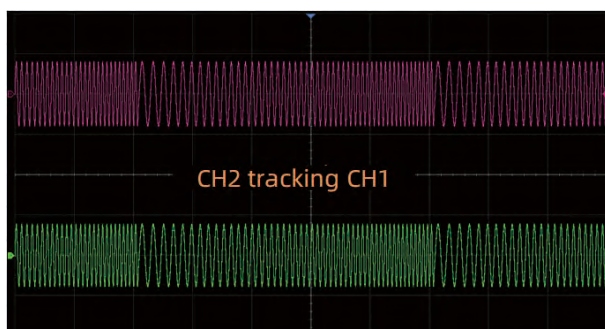
Independent mode

enables the two channels to be used as two independent generators. Independent mode also eliminated the discontinuity on the output when parameters (frequency, amplitude) change.



Phase-Locked mode

Automatically aligns the phases of each output.



Track/Copy/Coupling

The track, copy and coupling functions between the two channels can quickly transfer the parameters of one channel to the other according to the requirements, greatly simplify the operation and meet the requirements of fast and synchronous switching waveforms.

Specifications

Model	SDG7102A	SDG7052A	SDG7032A
Number of channels	2 Differential/Single-ended		
Bandwidth	1 GHz	500 MHz	350 MHz
Sample rate	5 GSa/s		
Vertical resolution	14-bit		
Arbitrary waveform	0.01 Sa/s ~ 2.5 GSa/s sample rate; 24 pts ~ 512 Mpts/ch memory depth, with segment editing and playback		
Vector signal (Optional)	500 MS/s max symbol rate; Carrier DC ~ 1 GHz settable. Includes modulation modes such as ASK, PSK, FSK and QAM. EasyIQ software provides vector signal creation and editing		
Continuous waveform	Up to 1GHz, supports harmonic generation function		
Pulse	Min pulse width 1 ns, min. edge 500 ps pulse with low jitter, the rise/fall edge is independently fine adjustable, and the pulse width is fine adjustable		
Noise	Bandwidth 1 MHz ~ 1 GHz adjustable		
PRBS	Bit rate 1 μ bps ~ 312.5 Mbps, length PRBS3 ~ PRBS32		
Complex signal generation	Supports internal/external modulation, AM, FM, PM, PWM, FSK, PSK, ASK, etc.; Supports sweep; Support burst		
Dual-channel function	Inter channel tracking, coupling, and copying. Dual channel superposition function. Supports mutual modulation between channels		
Output range	24 Vpp analog output superimposed \pm 12 V DC offset, supports a maximum output range of \pm 24 V (48 V)		
Digital bus(Optional)	16-bit, LVTTTL or LVDS output Bit rate: 1 μ bps ~ 1 Gbps		
Interface	USB 2.0 Host x3, USB 2.0 Device(USBTMC) LAN 10M/100M (VXI-11/Telnet/Socket/WebServer) EXT MOD/CNT, 10MHz In, 10MHz Out, Marker x2, Trigger In/Out		
Interaction	5" TFT-LCD with capacitive touch screen (800x480) Supports mouse operation Supports Webserver Supports SCPI control		

Ordering Information

Product Description	
SDG7102A	1 GHz, 5 GSa/s, 14-bit, 512 Mpts, 5-inch capacitive touch screen
SDG7052A	500 MHz, 5 GSa/s, 14-bit, 512 Mpts, 5-inch capacitive touch screen
SDG7032A	350 MHz, 5 GSa/s, 14-bit, 512 Mpts, 5-inch capacitive touch screen
Standard Configurations	
USB cable×1	
BNCcoaxial cable×2	
Quick start ×1	
Power cord ×1	
Wireless mouse×1	
Optional Configurations	Model
20 dB Attenuator	ATT-20dB
Single Instrument Rack Mount Kit	SSG-RMK
USB-GPIB Adapter	USB-GPIB
High precision OCXO (Installed at the factory, cannot be added after purchase)	10M_OCXO_L
Digital Bus Kit-LVTTTL	DIG-LVTTTL
Digital Bus Kit-LVDS (Without RF cables)	DIG-LVDS
Digital Bus Kit-LVDS (With 32 RF cables)	DIG-LVDS-2
IQ Signal Generator Function (software)	SDG-7000A-IQ
350 MHz to 500 MHz bandwidth upgrade (software)	SDG-7000A-BW05
500 MHz to 1 GHz bandwidth upgrade (software)	SDG-7000A-BW10

SDG6000X Series Pulse/Arbitrary Waveform Generator

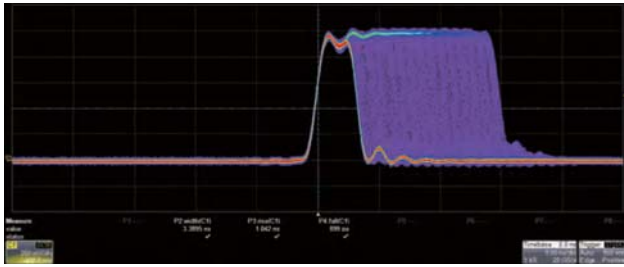
Easy Pulse *True Arb*



Key Features

- Dual-Channel, 500 MHz maximum bandwidth, 20 Vpp maximum output amplitude, high fidelity output with 80 dB dynamic range
- High-performance sampling system with 2.4 GSa/s sampling rate and 16-bit vertical resolution
- Innovative TrueArb technology, based on a point-by-point architecture, supports any 8 pts~8 Mpts Arb waveform with a sampling rate in range of 1 μ Sa/s~75 MSa/s
- Innovative EasyPulse technology, capable of generating lower jitter Square or Pulse waveforms, brings a wide range and extremely high precision in pulse width and rise/fall times adjustment
- Multi-function signal generator, meeting requirements in wide range, Continuous Wave Generator, Pulse Generator, Function Arbitrary Waveform Generator, IQ Signal Generator (optional), Noise Generator, PRBS Generator
- Sweep and Burst function
- Harmonics function
- Waveform Combining function
- Channel Coupling, Copy and Tracking function
- 196 built-in arbitrary waveforms
- High precision Frequency Counter
- Standard interfaces include: USB Host, USB Device (USBTMC), LAN (VXI-11, Socket, Telnet), GPIB (Optional)
- 4.3" touch screen display for easier operation

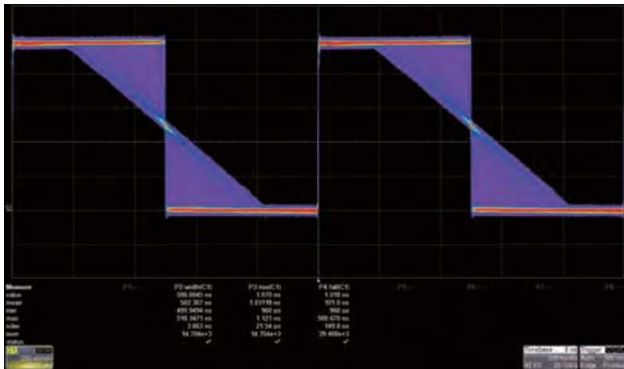
Characteristics



- Pulse 

Adjustable Pulse Width

The pulse width can be fine-tuned to the minimum of 3.3 ns with an adjustment step as small as 100 ps, at any frequency.



Adjustable Edge

The rise/fall times can be set independently to the minimum of 1 ns at any frequency with a minimum adjustment step as small as 100 ps.

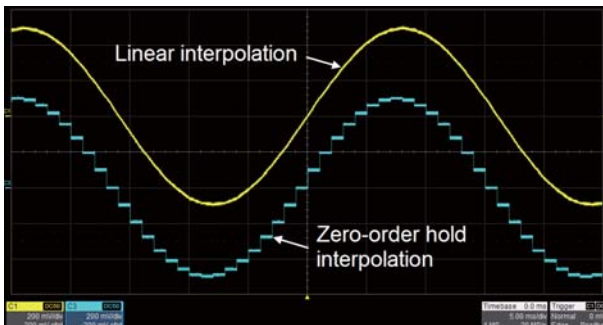


Low Jitter

When a Square/Pulse waveform is generated by traditional DDS, there can be additional jitter if the sampling rate is not an integer-related multiple of the output frequency. EasyPulse technology successfully overcomes this weakness in DDS designs and helps to produce low jitter Square/Pulse waveforms.

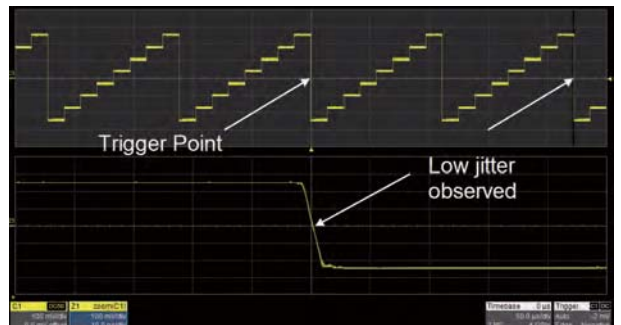
- Arbitrary Waveform **True Arb**

Traditional DDS designs can lead to additional jitter and distortion when sourcing arbitrary waveforms. The SIGLENT TrueArb design minimizes jitter and distortion to help deliver high fidelity arbitrary waveforms.



Point by Point Output

TrueArb generates arbitrary waveforms point-by-point. It never skips any point so that it can reconstruct all the details of the waveform, as defined. Two interpolation modes are available: linear and zero-order hold.

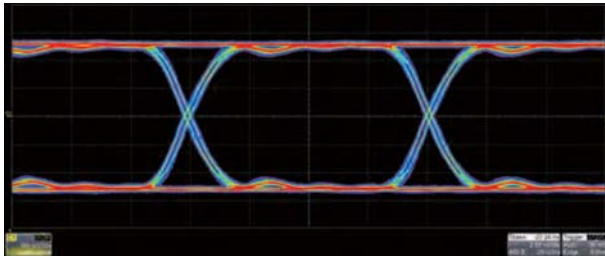


Low Jitter

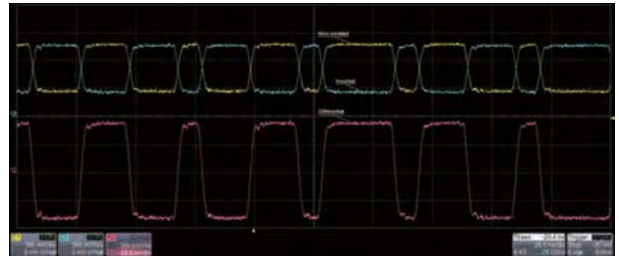
As with EasyPulse, TrueArb effectively overcomes the clock jitter that can effect traditional DDS generators.

Waveform Generator

- PRBS

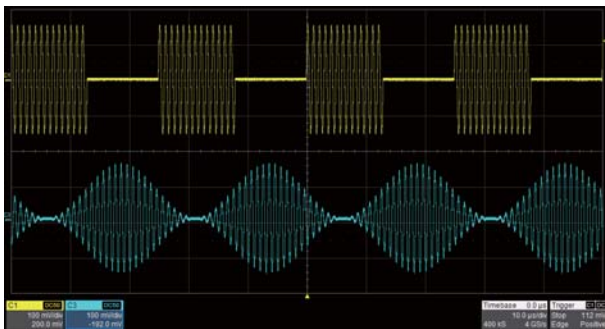


PRBS3 ~ PRBS32 with finely adjustable 10^6 bps ~ 300 Mbps bit rate and 1 ns ~ 1us edge.



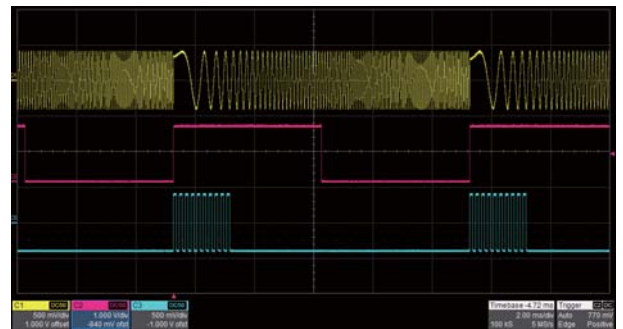
Preset common logic levels such as TTL, LVCMOS, LVPECL and LVDS. An added differential mode provides an easy way to generate differential signals using the both channels.

- Complex Signals Generation



Modulation

Plenty of modulation types, such as AM, FM, PM, FSK, ASK, PSK, DSB-AM, PWM are supported. The modulation source can be configured as "Internal" or "External".

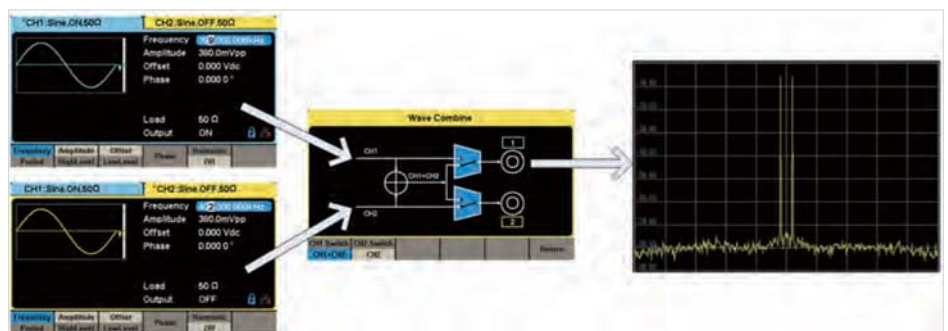


Sweep and Burst

Sweep modes include "Linear" and "Log". Burst modes includes "N cycle" and "Gated". Both Sweep and Burst can be triggered by "Internal", "External" or "Manual" source.

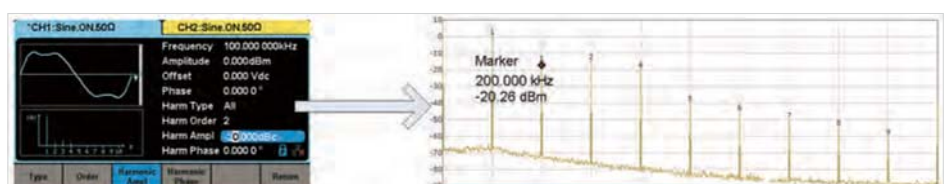
Waveform Combining

The waveform combining function superimposes CH1 and CH2 waveforms internally and provides the combined waveform to a user-selected output. Easily combine basic waveforms, random noise, modulation signals, sweep signals, burst signals, EasyPulse waveforms and TrueArb waveforms.

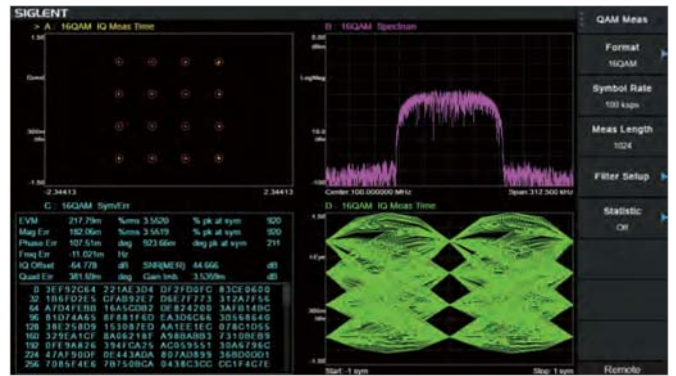
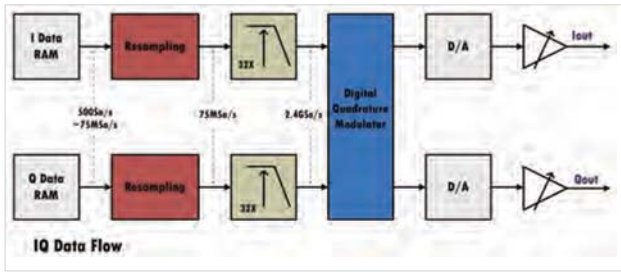


Harmonics Function

Harmonics function gives you the ability to add higher-order elements to your signal.



• IQ (optional)



The SDG6000X supports popular modulation types such as ASK, FSK, PSK, and QAM. Proprietary resampling technology provides excellent EVM performance at arbitrary symbol rates between 250 Symb/s ~ 37.5 MSymb/s. Built-in digital quadrature modulator provides the possibility to generate IQ signals from baseband to 500 MHz intermediate frequency.

Specifications

Model	SDG6022X	SDG6032X	SDG6052X
Bandwidth	200 MHz	350 MHz	500 MHz
Number of channels	2		
Sampling rate	2.4 GSa/s (2X Interpolation)		
Vertical resolution	16 bit		
Arbitrary waveform length	2 ~ 20 Mpts		
Display	4.3" touch screen display, 480 x 272 x RGB		
Interface	Standard: USB Host, USB Device, LAN Optional: GPIB (USB-GPIB adaptor)		

Ordering Information

Product Description	
SDG6052X	500 MHz, 2-CH, 2.4 GSa/s, 16-bit
SDG6032X	350 MHz, 2-CH, 2.4 GSa/s, 16-bit
SDG6022X	200 MHz, 2-CH, 2.4 GSa/s, 16-bit
Standard Configurations	
Quick start ×1	
Power cord ×1	
Calibration certificate ×1	
USB cable ×1	
BNC coaxial cable x2	
Optional Configurations	
SPA1010	10 W Power Amplifier
ATT-20dB	20 dB Attenuator
USB-GPIB	USB-GPIB Adapter
SDG-6000X-IQ	IQ Signal Generator Function

SDG2000X Series Function/Arbitrary Waveform Generator

 **Easy Pulse**

True Arb

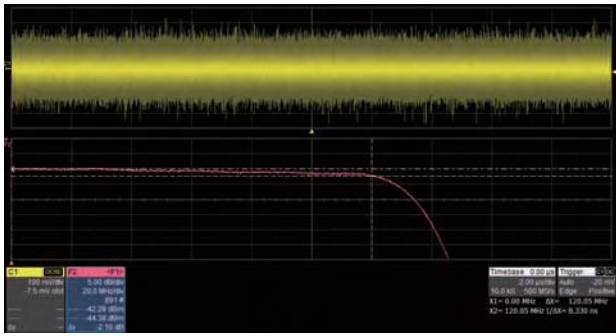


Key Features

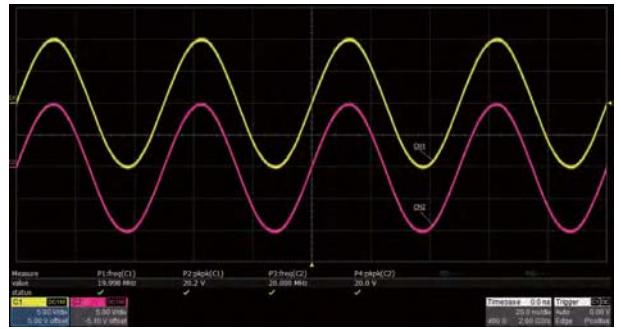
- Dual-channel, 120 MHz maximum bandwidth, 20 Vpp maximum output amplitude, high fidelity output with 80 dB dynamic range
- High-performance sampling system with 1.2 GSa/s sampling rate and 16-bit vertical resolution. No detail in the waveforms will be lost
- Innovative TrueArb technology, based on a point-by-point architecture, supports any 8 pts~8 Mpts Arb waveform with a sampling rate in range of 1 μ Sa/s~75 MSa/s
- Innovative EasyPulse technology, capable of generating lower jitter Square or Pulse waveforms, brings a wide range and extremely high precision in pulse width and rise/fall times adjustment
- Plenty of analog and digital modulation types: AM, DSB-AM, FM, PM, PSK, FSK, ASK and PWM
- Practical functions: Channel Copy, Channel Coupling, Channel Track, harmonic generator, overvoltage protection function
- Sweep and Burst function, Harmonics mode supported
- High precision Frequency Counter
- Standard interfaces: USB Host, USB Device (USBTMC), LAN (VXI-11)
- Optional interface: USB-GPIB
- 4.3" touch screen display for easier operation

Characteristics

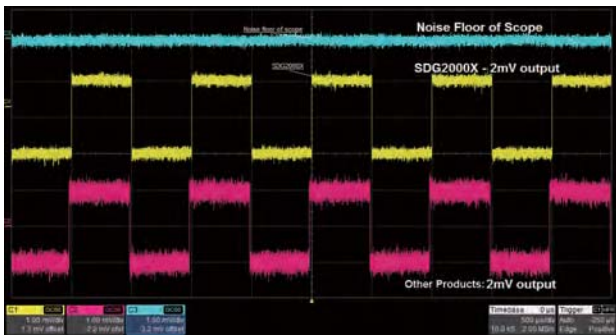
- Excellent Analog Channel Performance



The bandwidth of analog channels proves to be greater than 120 MHz, via doing a frequency response test with white noise.



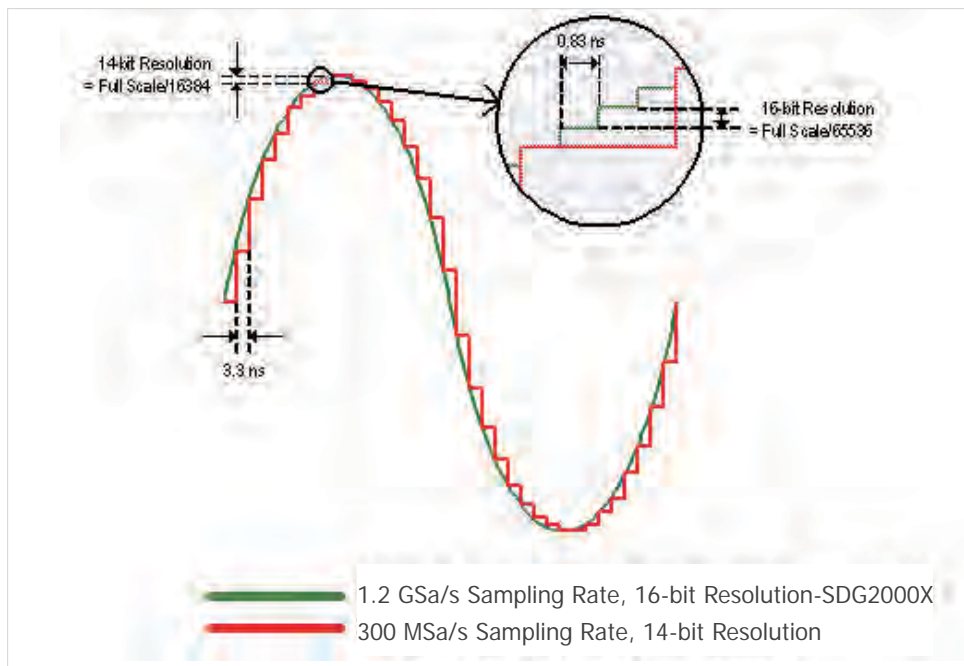
Capacity of outputting large signal at high frequency. Dual-channel, 20 Vpp amplitude can be guaranteed even @20 MHz.



◀ Low noise floor, improves signal-noise ratio.

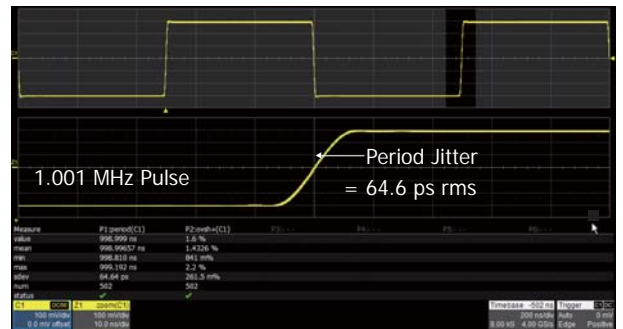
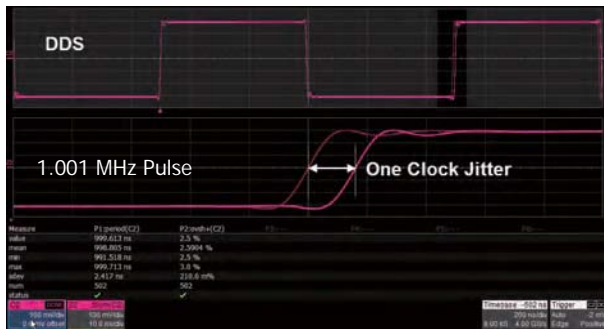
- High-performance Sampling System

Benefiting from a 1.2 GSa/s and 16-bit sampling system, SDG2000X achieves extremely high accuracy performance in both time domain and amplitude, which results in more accurately reconstructed waveforms and lower distortion.

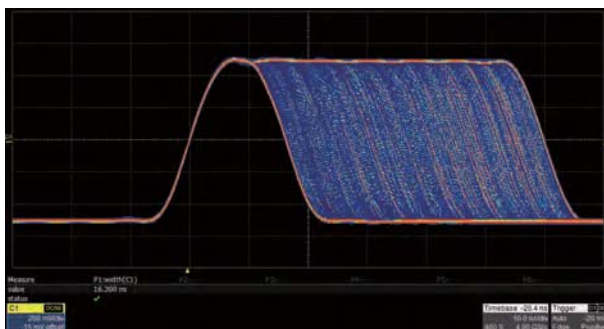


Waveform Generator

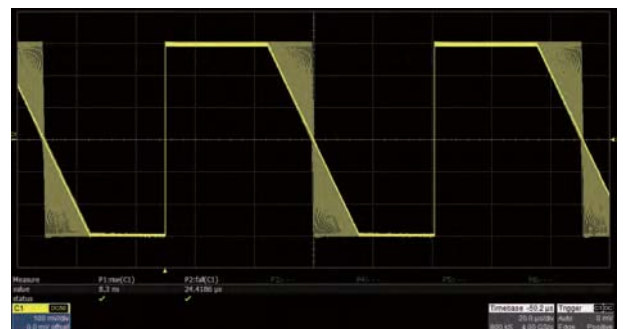
- Innovative EasyPulse Technology



When a Square/Pulse waveform is generated by DDS, there will be a one-clock-jitter if the sampling rate is not an integer-related multiple of the output frequency. SDG2000X EasyPulse technology successfully overcomes this weakness in DDS designs and helps to produce low jitter Square/Pulse waveforms.



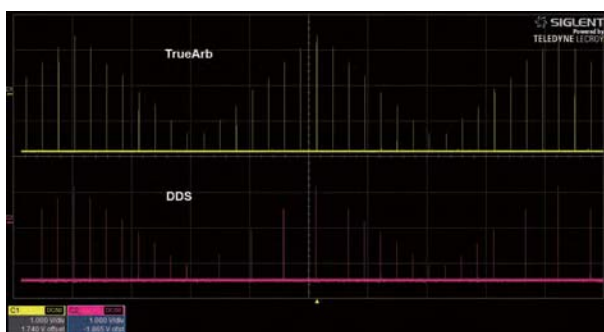
The Pulse width can be fine-tuned to the minimum of 16.3 ns with the adjustment step as small as 100 ps.



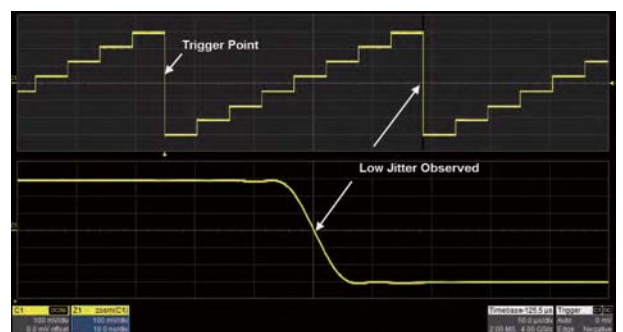
The rise/fall times can be set independently to the minimum of 8.4 ns at any frequency and to the maximum of 22.4 s. The adjustment step is as small as 100 ps.

- Innovative TrueArb Technology

For arbitrary waveforms, TrueArb not only has all the advantages of traditional DDS, but also eliminates the probability that DDS may cause serious jitter and distortion.

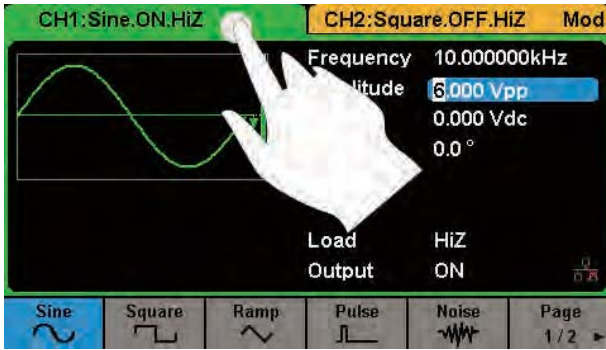


TrueArb generates arbitrary waveforms point by point, never skips any point so that it can reconstruct all the details of the waveform as defined.



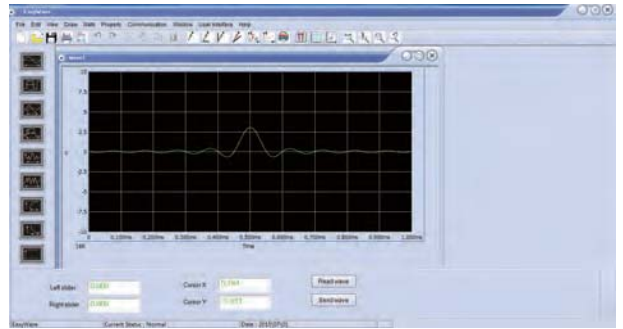
As with EasyPulse, TrueArb effectively overcomes the defect that DDS may cause the one-clock-jitter in arbitrary waveforms.

- 4.3" Touch Screen Display



4.3" touch screen display, makes operation much more convenient.

- Arbitrary Waveform Software EasyWave



EasyWave is a powerful arbitrary waveform editing software that supports several ways to generate arbitrary waveform such as manual drawing, line-drawing, equation-drawing, coordinate-drawing, etc. It is quite convenient for users to edit their own arbitrary waveforms through EasyWave.

Specifications

Product Model	SDG2042X	SDG2082X	SDG2122X
Bandwidth	40 MHz	80 MHz	120 MHz
Sampling rate	1.2 GSa/s (4 X Interpolation)		
Vertical resolution	16 bit		
Num. of channels	2		
Max. amplitude	±10 V		
Display	4.3" touch screen display, 480 x 272 x RGB		
Interface	Standard: USB Host, USB Device, LAN Optional: GPIB (USB-GPIB adaptor)		

Ordering Information

Product Description	SDG2000X Series Function/Arbitrary Waveform Generator		
Product code	SDG2042X	40 MHz	
	SDG2082X	80 MHz	
	SDG2122X	120 MHz	
Standard configurations	A Quick Start, A Power Cord, A USB Cable, A Calibration Certificate, A BNC Coaxial Cable		
Optional configurations	USB-GPIB adapter		

SDG1000X Plus

Function/Arbitrary Waveform Generator

 **Easy Pulse**

True Arb

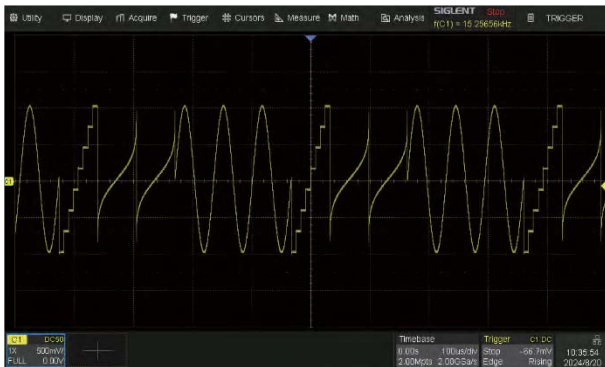


Key Features

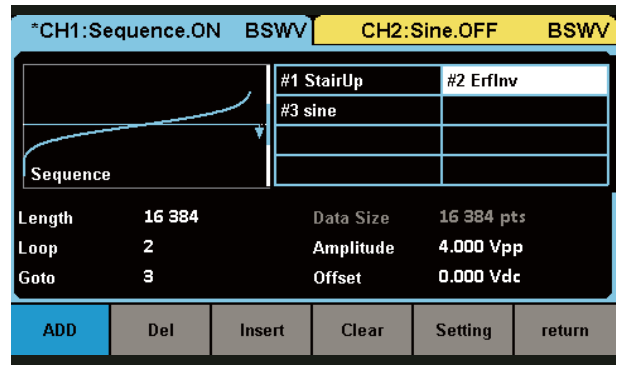
- Dual channel, maximum output frequency 60 MHz, maximum output amplitude 20 Vpp
- 1 GSa/s digital-to-analog converter sampling rate, 16-bit vertical resolution
- Innovative TrueArb technology, based on a point-by-point architecture, supports any 24pts ~ 8Mpts Arb waveform with a sampling rate in range of 1 μ Sa/s ~ 250 MSa/s
- Supports sequence wave playback function, maximum storage depth per channel 8 Mpts
- Innovative EasyPulse technology, capable of generating lower jitter Square or Pulse waveforms, brings a wide range and extremely high precision in pulse width and rise/fall times adjustment
- Multi-pulse output function can be used to measure the switching parameters of power equipment and evaluate its dynamic characteristics
- Supports PRBS up to 40 Mbps
- Plenty of analog and digital modulation types: AM, DSB-AM, FM, PM, FSK, ASK, PSK and PWM
- Sweep and Burst function
- Harmonic function
- Waveform Combining function
- High precision Frequency Counter
- 196 built-in arbitrary waveforms
- Built-in WebServer supports instrument control via web browser
- Standard interfaces: USB Host, USB Device (USBTMC), LAN (VXI-11)
- 4.3" LCD display

Characteristics

- Powerful arbitrary wave generation capability and sequence playback function



Provides sequence playback function to easily meet various testing needs. Maximum waveform storage depth reaches 8 Mpts/ch.



Easily set the number of cycle times for each waveform and the order of waveform playback.

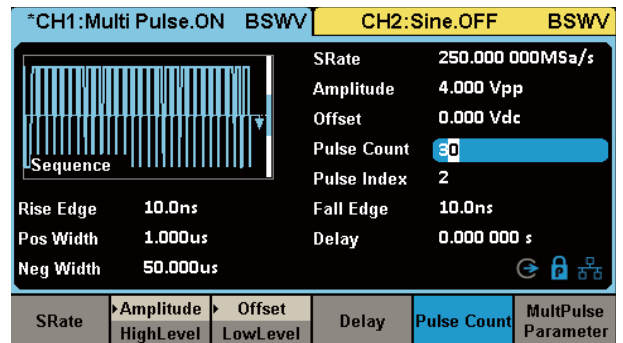
Three operating modes: continuous, burst and single.

Three trigger sources are available: "internal", "external" and "manual".

- Built-in multi-pulse output function

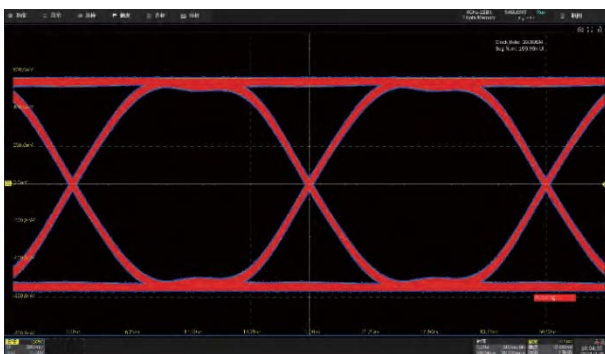


Built-in dual pulse output function, combined with siglent's oscilloscope, can quickly measure the switching parameters and dynamic characteristics of power devices without the need for host computer software.

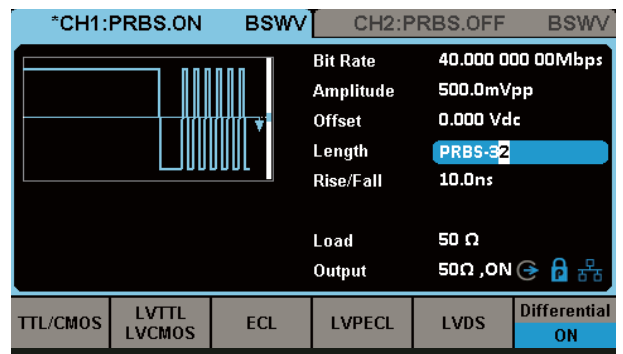


Supports up to 30 pulses, each pulse can be independently set with pulse edge and positive and negative pulse width.

- PRBS pattern output



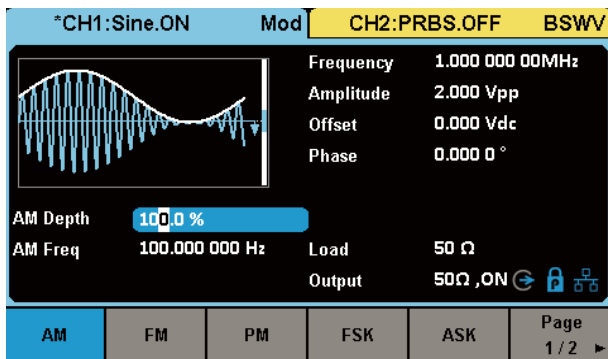
Provides PRBS3 ~ PRBS32 multiple pattern outputs, the rate is arbitrarily adjustable between 10-6 bps ~ 40 Mbps, and the edge is arbitrarily adjustable between 10 ns ~ 1us.



Quickly select preset level logic such as TTL, LVCMOS, LVPECL and LVDS. Differential mode allows you to easily set up two channels as a differential pair output.

Waveform Generator

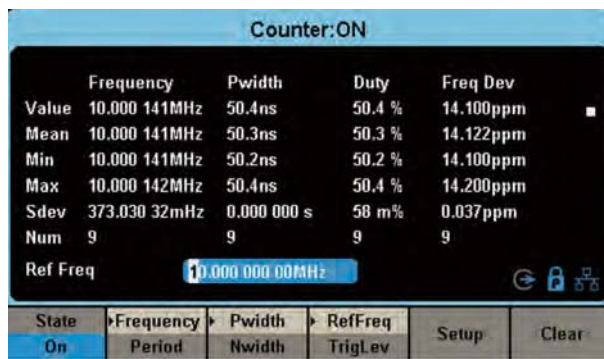
- Modulation



Rich modulation functions, supporting commonly used AM/DSB-AM/ FM/ PM/ ASK/ FSK/ PSK/ PWM modulation methods.

Optional internal and external modulation sources.

- Frequency Counter



High-precision frequency counter, capable of testing the frequency range of 0.1 Hz~200 MHz.

Specifications

Model	SDG1062X Plus	SDG1032X Plus	SDG1022X Plus
Max output frequency	60 MHz	30 MHz	25 MHz
Number of channels	2		
Sampling rate	1 GSa/s (4X Interpolation)		
Vertical resolution	16 bits		
Arbitrary waveform length	8 Mpts/CH		
Max. amplitude	±10 V		
Display	4.3" display, 480 x 272 x RGB		
Interface	Standard: USB Host, USB Device, LAN Optional: GPIB (USB-GPIB adaptor)		

Ordering Information

Product Model	Description
SDG1022X Plus	25 MHz, 2 CH, 1 GSa/s, 16-bit, Sequence playback function.
SDG1032X Plus	30 MHz, 2 CH, 1 GSa/s, 16-bit, Sequence playback function.
SDG1062X Plus	60 MHz, 2 CH, 1 GSa/s, 16-bit, Sequence playback function.
Standard Configurations	
	Quantity
Quick Start	1
Power Cord	1
USB Cable	1
Calibration Certificate	1
Optional Configurations	
	Model
BNC Coaxial Cable	SDG-BNC
20 dB Attenuator	ATT-20 dB
USB-GPIB Adapter	USB-GPIB
10W Power Amplifier	SPA1010

SDG1000X

Function/Arbitrary Waveform Generator

 Easy Pulse

 True Arb



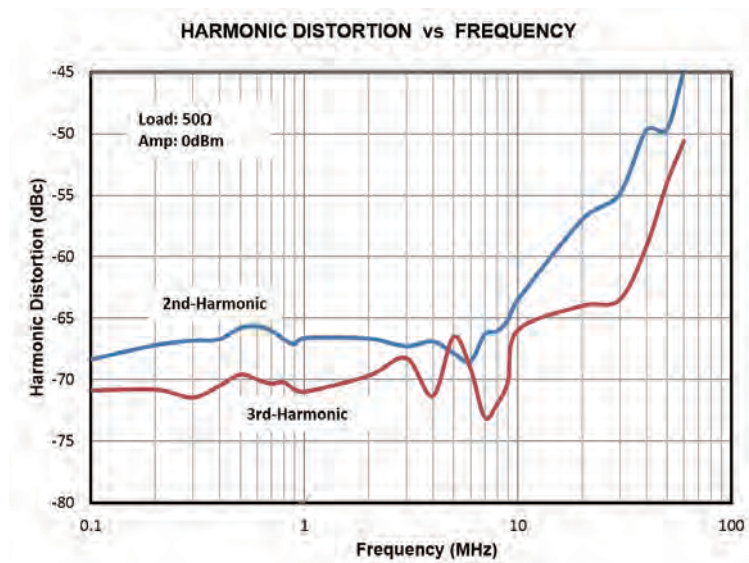
Application

- IC test
- Simulate sensor
- Simulate environment signals
- Electrical circuit function test
- Education and training

Key Features

- Dual-channel, with bandwidth up to 60 MHz, and amplitude up to 20 Vpp
- 150 MSa/s sampling rate, 14-bit vertical resolution, and 16 kpts waveform length
- Innovative EasyPulse technology, capable of generating lower jitter Pulse waveforms, brings a wide range and extremely high precision in pulse width and rise/fall times adjustment
- Innovative TrueArb technology, based on a point-by-point architecture, supports any 8 pts~8 Mpts Arb waveform with a sampling rate in range of 1 μ Sa/s~75 MSa/s
- Special circuit for Square wave function, can generate Square waves up to 60 MHz with jitter less than 300 ps+0.05 ppm of period
- Plenty of analog and digital modulation types: AM, DSB-AM, FM, PM, FSK, ASK, PSK and PWM
- Sweep and Burst functions
- Harmonics Generator function
- Waveform Combining function
- High precision Frequency Counter
- Standard interfaces: USB Host, USB Device (USBTMC), LAN (VXI-11)
- Optional interface: GPIB
- 4.3" TFT-LCD display

Characteristics



- Low Distortion Output

With 0 dBm output, the THD (Total Harmonic Distortion) is less than 0.075%. Harmonics and spurs are less than -40 dBc throughout the entire bandwidth.

- High performance Square Waves

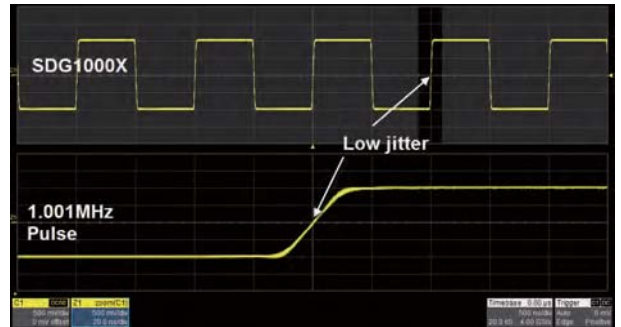
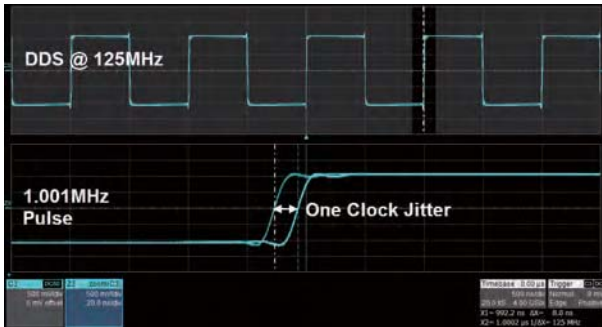


Benefiting from a special square-wave generating circuitry, the Square from the SDG1000X breaks the 60 MHz bandwidth barrier, reaching rise/fall times of less than 4.2 ns, and frequencies up to 60 MHz.

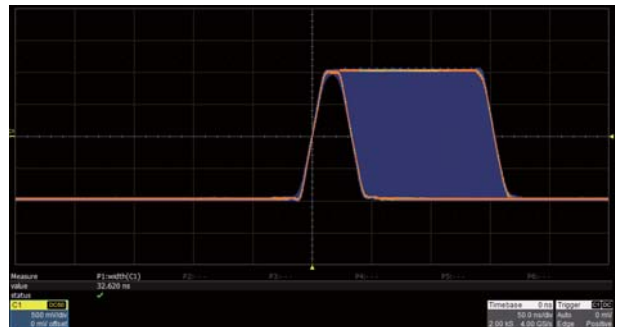
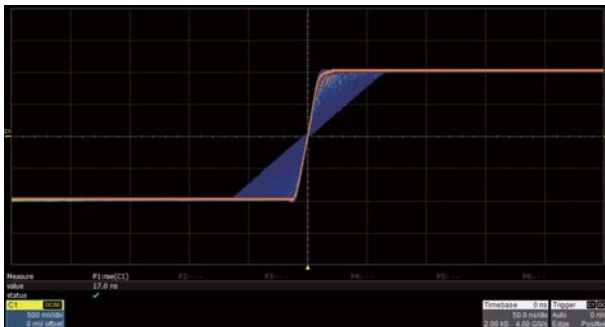


▶ The Square wave exhibits the same excellent jitter performance as the Pulse waveform.

- Innovative EasyPulse Technology



When a Pulse waveform is generated by a common DDS generator, there will be a one-clock-jitter if the sampling rate is not an integer-related multiple of the output frequency. SDG1000X EasyPulse technology successfully overcomes this weakness in DDS designs and helps to produce low jitter Pulse waveforms.



The rise/fall times can be set independently to the minimum of 16.8 ns at any frequency and to the maximum of 22.4 s. The adjustment step is as small as 100 ps. The Pulse width can be fine-tuned to the minimum of 32.6 ns with the adjustment step as small as 100 ps.

Models and Key Specifications

Product Model	SDG1032X	SDG1062X
Bandwidth	30 MHz	60 MHz
Sampling rate	150 MSa/s	
Vertical resolution	14-bit	
Waveform Length	16 kpts	
Num. of channels	2	
Max. amplitude	±10 V	
Display	4.3" display, 480 x 272 x RGB	
Interface	Standard: USB Host, USB Device, LAN Optional: GPIB (USB-GPIB adaptor)	

Ordering Information

Product Description	
30 MHz, 2 CH, 150 MSa/s, 14 bit	SDG1032X
60 MHz, 2 CH, 150 MSa/s, 14 bit	SDG1062X
Standard configurations	
Quick Start -1	
Power Cord-1	
Calibration Certificate -1	
USB Cable -1	
Optional configurations	
BNC Coaxial Cable	SDG-BNC
20 dB Attenuator	ATT-20dB
USB-GPIB Adapter	USB-GPIB



SDG800 Easy Pulse Function/Arbitrary Waveform Generator

Application

- Simulate sensor
- Simulate environmental signal
- Circuit function test
- IC chip test
- Research and education

Key Features

- Advanced DDS technology, 125 MSa/s sampling rate, 14 bit vertical resolution
- Single channel output, 5 kinds of standard waveforms, built-in 46 kinds of arbitrary waveforms (including DC)
- Complete modulation functions: AM, DSB-AM, FM, PM, FSK, ASK, PWM, linear/logarithmic sweep and burst
- Innovative EasyPulse technology, can output pulse of low jitter, quick rising/falling edge
- Standard interfaces: USB Device, USB Host, support U-Disk storage and software update
- Provide 10 nonvolatile storage spaces for user's arbitrary waveforms
- Be capable of seamlessly connected to SIGLENT Digital Storage Oscilloscope
- Configurable with powerful arbitrary waveform editing software EasyWave

Specifications

Model	SDG805	SDG810	SDG830
Maximum output frequency	5 MHz	10 MHz	30 MHz
Output channels	1		
Sampling rate	125 MSa/s		
Wave length	16 kpts		
Frequency resolution	1 μ Hz		
Vertical resolution	14 bit		
Waveform	Sine, Square, Ramp, Pulse, Gaussian white noise, Arbitrary waveform, 46 types of built-in arbitrary waveforms		
Sine wave	1 μ Hz ~ 5 MHz	1 μ Hz ~ 10 MHz	1 μ Hz ~30 MHz
Square wave	1 μ Hz ~ 5 MHz	1 μ Hz ~ 10 MHz	1 μ Hz ~10 MHz
Pulse	500 μ Hz ~ 5 MHz	500 μ Hz ~ 5 MHz	500 μ Hz ~5 MHz
Ramp/Triangular	1 μ Hz ~ 300 kHz	1 μ Hz ~ 300 kHz	1 μ Hz ~ 300 kHz
Gaussian white noise	>5 MHz bandwidth (-3 dB)	>10 MHz bandwidth (-3 dB)	>30 MHz bandwidth (-3 dB)
Arbitrary waveform	1 μ Hz ~ 5 MHz	1 μ Hz ~ 5 MHz	1 μ Hz ~ 5 MHz
Modulation function	AM, FM, PM, DSB-AM, FSK, ASK, PWM, Sweep, Burst		
Standard configuration	USB Host & USB Device		
Amplitude (high impedance)	4 mVpp~20 Vpp (\leq 10 MHz) 4 mVpp~10 Vpp ($>$ 10 MHz)		



About SIGLENT

SIGLENT is an international high-tech company, concentrating on R&D, sales, production and services of electronic test & measurement instruments.

SIGLENT first began developing digital oscilloscopes independently in 2002. After more than a decade of continuous development, SIGLENT has extended its product line to include digital oscilloscopes, isolated handheld oscilloscopes, function/arbitrary waveform generators, RF/MW signal generators, spectrum analyzers, vector network analyzers, digital multimeters, DC power supplies, electronic loads and other general purpose test instrumentation. Since its first oscilloscope was launched in 2005, SIGLENT has become the fastest growing manufacturer of digital oscilloscopes. We firmly believe that today SIGLENT is the best value in electronic test & measurement.

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