

## SDG7000A Arbitrary Waveform Generator release

March 03, 2022

SIGLENT presents its most powerful arbitrary function generator series to date

Function and arbitrary signal generators are a critical part of an electronics laboratory where a flexible source can easily simulate sensor outputs, communications, and other complex signals. The SIGLENT SDG7000A series combines excellent output performance and high flexibility. This makes the series ideal for use in the development of embedded electronics.



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SIGLENT Technologies introduces the next instrument in its Performance Series. The new two-channel arbitrary function generator is offered in three bandwidths: 350 MHz, 500 MHz, and 1 GHz. The two independent channels can be combined via menu control to simulate interference on the main signal or to easily generate complex modulated signals. In addition to standard waveforms such as sine, square, triangle, and pulse, the generators in the series can output Gaussian noise with the device-specific bandwidth or with limited bandwidth. It is also possible to add noise to the main signal by setting it on the menu, which can ease receiver testing. Random Bit Sequence (PRBS) generation is also a standard feature. All devices are equipped with 512 Mpt memory for creating custom signals. Using Siglent's TrueArb technology, waveform fidelity is guaranteed with point-by-point output at up to 2.5 GS/s sample rate with minimal jitter. User-defined signals can be generated with Siglent EasyWave software or directly on the device display. In addition, it is possible to import arbitrary curves from text or CSV files. In sequence mode, users can sequence up-to 1024 waveform segments for more complex waveform creation.

The maximum output voltage is up to 12 Vpp into a 50 Ohm external load and when sourcing signals into a high-impedance environment, up to 24 Vpp is possible. This output range decreases the need for external amplification and features one of the highest voltages in its class. Outputs can be configured as single-ended or differential. The SDG7 also features robust modulation options, including FM, AM, PM, as well as optional digital IQ modulation. This means that baseband I and Q signals as well as HF-modulated signals with a carrier frequency of up to 1 GHz and a symbol rate of up to 500 MS/s can be generated. The generator supports sourcing up-to 16 digital signals with modules dedicated to either TTL or LVDS bus types. The maximum achievable data rate is 1 Gbps.

To make configuration easier, a well-thought-out user interface is at the center of the SDG7000A Series



operation. All settings can quickly be accessed from the graphically structured main menu. It can be operated directly on the 5-inch touch display or alternatively with a USB mouse. As with many Siglent devices, a web server is also embedded in the SDG7000A. The web server eliminates the need to install additional PC control software for remote control of the generator. Simply connect the generator to a LAN, open up a browser on your computer, enter the generator IP address, and control the instrument.

Contact your local SIGLENT office today to learn more about this powerful new generator series..

More information about the series:

<https://int.siglent.com/products-overview/sdg7000a/>

### **About Siglent:**

SIGLENT TECHNOLOGIES started in 2002 with the development of their first oscilloscope. Now, the portfolio has rapidly expanded to cover many areas of general-purpose test instrumentation, including oscilloscopes, signal and function generators, digital multimeters, lab power supplies, electronic DC-Loads, spectrum analyzers, VNAs, and RF-signal generators.

With the Performance Series “A-Line” introduced in 2021, Siglent is advancing their technical solutions to address some of the most demanding applications. Today SIGLENT TECHNOLOGIES is a global leader producing electronic test and measurement equipment that combines innovative features and functionality with a strong commitment to quality and performance. SIGLENT is ISO 9001:2000 and ISO 14001:2004 certified for its product quality and environmental management programs.

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