



Agilent Technologies  
Wide Bandwidth, High-Resolution AWGs

625 MS/s to 1.25 GS/s  
10-bit to 15-bit



Generate complex  
waveforms with  
the highest signal quality

Agilent's N6030A and N8241A Series of arbitrary waveform generators (AWGs) provide both wide bandwidth of 500 MHz on two channels and outstanding signal quality with a 15-bit resolution.

## Key Features

for the 1.25 GS/s, 15-bit version

- Two channels of 500 MHz and 15-bit resolution
- SFDR  $\leq -65$  dBc on each channel, DC to 500 MHz
- Noise floor  $\leq -150$  dBc/Hz across the channel bandwidth
- Sampling clock of 1.25 GS/s
- Availability both in PXI and LXI form-factor

## Application

Agilent Technologies offers PXI-based and LXI-based arbitrary waveform generators (AWGs) that can create simultaneous wide bandwidth and high-resolution signals for electronic testing of radar, satellite, telecom or military communication equipment.

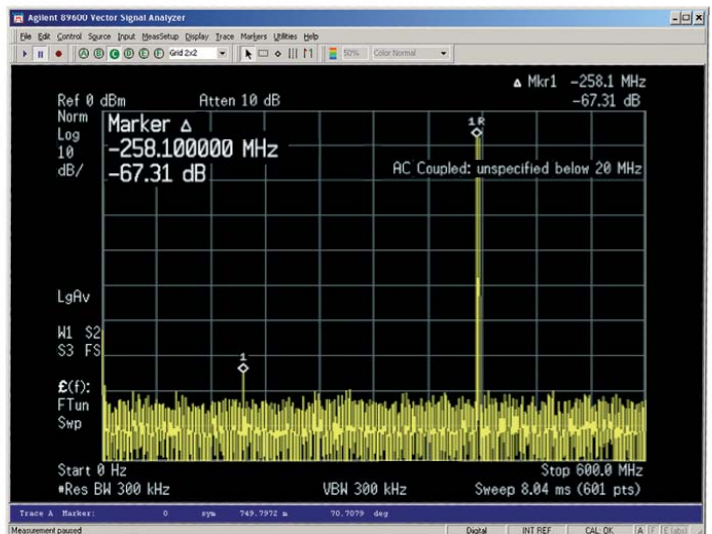
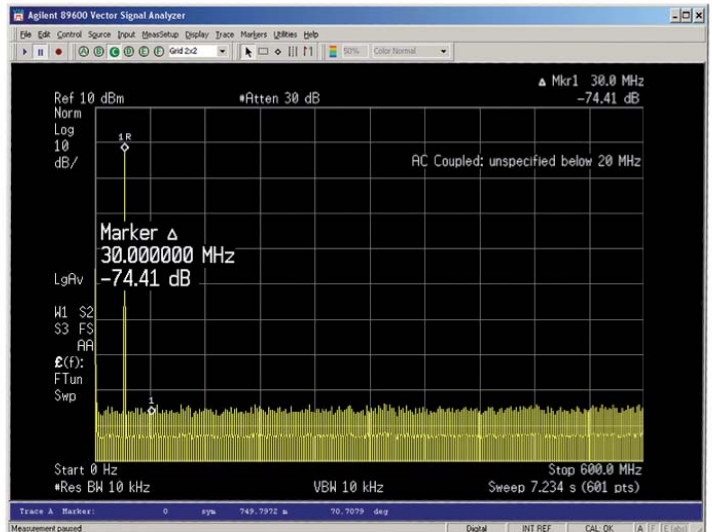
The 4-slot PXI N6030A and the LXI N8241A feature two channels, each offering 1.25 GS/s with up to 500 MHz of signal bandwidth. Dual output channels drive both single-ended and balanced designs without the need for balun or hybrid adapters in the test path.

When combined with the Agilent PSG vector signal generator wideband I/Q upconverter, the AWGs can achieve modulation bandwidths of 1 GHz at high frequency up to 44 GHz for authentic signal simulations for IF and RF subsystem testing as well.

Advanced sequencing and extended waveform memory of the AWGs provide long scenario simulations for extended playback times. Multiple programming interfaces, such as the complete instrument control from MATLAB®, enable easy integration into existing test environments as well as simplify waveform development tasks.



Using 15-bit vertical resolution, the N6030A (PXI) and N8241A (LXI) generate the most realistic wideband waveforms available in commercial AWGs.

## Unprecedented signal quality



**SFDR for two different tones: Agilent's N6030A and N8241A provide outstanding signal quality over the whole channel bandwidth.**

## The whole Agilent family of high-performance arbitrary waveform generators

Model	Form-factor	Nb of channels	Resolution	Sampling rate	Bandwidth (on each channel)	SFDR	Noise floor	Memory	
N6030A		PXI (4 slots)	2	15	1.25 GS/s	500 MHz	$\leq -65$ dBc	$\leq -150$ dBc/Hz	Up to 16 MSamples
N6031A		PXI (4 slots)	2	10	1.25 GS/s	500 MHz	$\leq -50$ dBc	$\leq -150$ dBc/Hz	Up to 16 MSamples
N6032A		PXI (4 slots)	2	15	625 MS/s	250 MHz	$\leq -65$ dBc	$\leq -150$ dBc/Hz	Up to 16 MSamples
N6033A		PXI (4 slots)	2	10	625 MS/s	250 MHz	$\leq -50$ dBc	$\leq -150$ dBc/Hz	Up to 16 MSamples
N8241A		LXI	2	15	625 MS/s to 1.25 GS/s	250 to 500 MHz	$\leq -65$ dBc	$\leq -150$ dBc/Hz	Up to 16 MSamples
N8242A		LXI	2	10	625 MS/s to 1.25 GS/s	250 to 500 MHz	$\leq -50$ dBc	$\leq -150$ dBc/Hz	Up to 16 MSamples

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Visit [www.agilent.com/find/AWG](http://www.agilent.com/find/AWG) for more information.

Product specifications and descriptions in this document subject to change without notice.