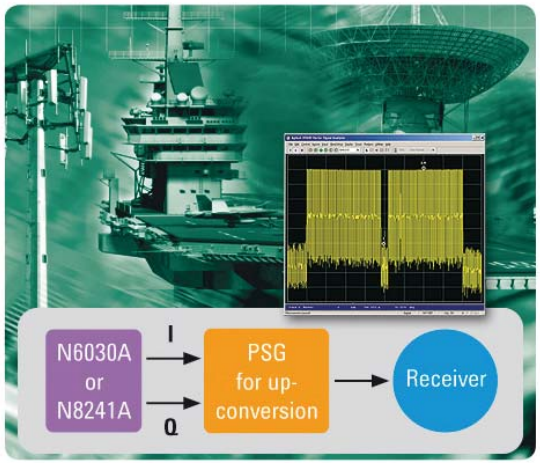
MARKET OVERVIEW: Arbitrary Waveform Generator for Aerospace & Defense

Wide Bandwidth, High-Resolution AWG for Test & Measurement Applications in A&D

Market Overview

For radar systems, designers need to generate test waveforms to verify their radar is correctly processing targets and to verify the performance of the up conversion chain from baseband to microwave. For communications systems, JTRS requires narrowband frequency agile signals. For satellite communication systems, designers are faced with increasing information bandwidths. For all of these applications, designers require a wideband AWG to simulate reference waveforms and have the added requirement to create high-fidelity signals.

Applications include: Radar test, satellite test, military communications, RF environment simulation, general receiver test.



Solution Description

- N6030A, 15-bit, 2 channels, 500 MHz, PXI AWG.
- N8241A, 15-bit, 2 channels, 500 MHz, LXI AWG.
- With the addition of the N7509A software for wideband signal generation and the N7620A for pulse building, this is a perfect solution for electronic testing of A&D systems.

Key Features and Added Value

- For system designers of wideband systems who require complex signal generation, our product is a modular arbitrary waveform generator that enables designers to simulate real-world, real-time signals for exact imitation of target radars, no unintentional signals above detection noise floor, multi-signal environments and much more.
- Signal quality and fidelity along with a wide bandwidth and the possibility to drive the I and Q input of a PSG is the key added value our solution.

Key Requirements

- Our strengths for these applications are in the signal quality and fidelity.
- Advanced sequencing engine.
- The DDS and dynamic sequencing options allow for very flexible signals and complex scenarios.

Resources

- N6030A PXI AWG technical overview: http://cp.literature.agilent.com/litweb/pdf/5989-1457EN.pdf
- N8241A LXI AWG technical overview: http://cp.literature.agilent.com/litweb/pdf/5989-2595EN.pdf
- AWG photocard: http://cp.literature.agilent.com/litweb/pdf/5989-8338EN.pdf
- AWG website: www.agilent.com/find/AWG
- Data Converter product selection guide: http://cp.literature.agilent.com/litweb/pdf/5989-8038EN.pdf

Contact

- Agilent Technologies – Signal Network Division – Data Converter team: digitizers@agilent.com

www.agilent.com

Printed in USA, September 16, 2009
5990-4774EN

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

Agilent Technologies