



# A<sup>2</sup>DSG™

## GENERATING COMPLEX EMITTER SIMULATIONS FOR NUMEROUS PLATFORMS

Our Advanced Architecture Desktop Signal Generator (A<sup>2</sup>DSG) is designed to provide a small, affordable, portable signal generation capability for signal development, signal test and signal verification and validation (V&V) of ground-based, air-to-air and surface-to-air missile (SAM) threats. Our unique, plug-and-play, uses direct digital Synthetic Stimulus Instruments (SSIs) as the radio frequency (RF) source for all signals. The configurable A<sup>2</sup>DSG and Intuitive 3D graphical user interface with enhanced visualization provides all the capability sized for your needs and affordably priced to complement any budget.

**TEXTRON** Systems

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# A<sup>2</sup>DSG ADVANCED ARCHITECTURE DIGITAL SIGNAL GENERATOR

## SPECIFICATIONS



**Pulse density**  
Up to 2, 4MPPS  
(expandable to 8MPPS)



**RF source**  
Textron Systems SSIs  
Up to 8 SSIs per port



**Noise floor**  
-90 dBm/MHz  
(No signal present)



**Frequency resolution/accuracy**  
0.022°/1.7° RMS



**Spurs & harmonics**  
-60 dBc (typ)/-55 dBc (max)



**Pulse width range**  
24 ns to 1.0 s/20 ps+-1.0ns



**Pulse repetition interval**  
512 ns to 1.0 s/20 ps+-1.0 ns



**Operating Frequency Range**  
Standard 20 MHz - 22 GHz continuous

## KEY FEATURES & BENEFITS

- Designed for easy system expansion through addition of identical catalog commercial, off-the-shelf SSI modules
- Allows for long-periods of simulation time with no external calibration procedures
- Simultaneous phase, amplitude and time angle of arrival simulation
- Varying numbers of identical SSIs in each port enable stringent testing scenarios
- Reconfigurable architecture meets test requirements
- Easy setup, installation and relocation
- Combining synthesizers enables pulse densities exceeding eight million pulses per second for complex signals and scenarios

For information within the  
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