A²DSG[™]

TEST, TRAINING 8 SIMULATION

GENERATING COMPLEX EMITTER SIMULATIONS FOR NUMEROUS PLATFORMS

Our Advanced Architecture Desktop Signal Generator (A²DSG) 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 A²DSG and Intuitive 3D graphical user interface with enhanced visualization provides all the capability sized for your needs and affordably priced to complement any budget.

TextronSystems.com

TEXTRON Systems

PUSHING PAST POSSIBLE

A²DSG ADVANCED ARCHITECTURE DIGITAL SIGNAL Generator

SPECIFICATIONS



PULSE DENSITY Up to 4MPPS (expandable to 8MPPS)



FREQUENCY RESOLUTION/ ACCURACY 0.1 Hz/+- 1Hz



PULSE REPETITION INTERVAL 512 ns to 1.0 s 20 ps (resolution) +/- 1.0 ns (accuracy)



RF SOURCE Textron Systems SSIs Up to 4 SSIs



SPURS & HARMONICS -60 dBc (typ)/-55 dBc (max)



OPERATING FREQUENCY RANGE Standard 20 MHz - 22 GHz continuous



NOISE FLOOR
<90 dBm/MHz
(No signal present)</pre>



PULSE WIDTH RANGE 24 ns to 1.0 s 20 ps (resolution) +/- 1.0 ns (accuracy)

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, 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

COMMERCIAL APPLICATIONS

- > Cell phone signal testing
 - Tower communications/handoffs
 - Cell phone communications/handoffs
- > Automated Identification System (AIS) The Automatic Identification System (AIS) is an automatic tracking system used on ships and by vessel traffic services (VTS) for identifying and locating vessels by electronically exchanging data with other nearby ships, AIS base stations and satellites
- > Commercial Radar Test and Evaluation
 - Used to test commercial aviation radar receivers for airports/aircraft
- MODE S/ATCRBS generation Air traffic control radar beacon system (ATCRBS) is used in commercial air traffic control to enhance surveillance radar monitoring, separation and collision avoidance of air traffic. ATCRBS assists ATC surveillance radars by acquiring information about the aircraft being monitored, and providing this information to the radar controllers