



Integrated EW Cabinet Assembly –  
Part Number: 40354-40151-10 (Single enclosure)  
Part Number: 40354-40151-20 (Two enclosures)  
SSI Part Number: 40354-41110-50  
Specifications subject to change without notice.

# A<sup>2</sup>PATS<sup>®</sup>

## GENERATING COMPLEX THREAT EMITTER SIMULATIONS FOR NUMEROUS MILITARY EW PLATFORMS











Our Advanced Architecture Phase, Amplitude and Time Simulator (A<sup>2</sup>PATS) is designed to verify that U.S. and allied aircraft electronic warfare (EW) systems can precisely locate, identify and defend against ground-based, air-to-air and surface-to-air missile (SAM) threats. Our unique, plug-and-play, continuously aligned system uses identical phase coherent, direct digital Synthetic Stimulus Instruments (SSIs) as the radio frequency (RF) source for all signals. The configurable A<sup>2</sup>PATS Single-Cabinet System 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>PATS – SINGLE CABINET

## SPECIFICATIONS

|   |   |   |
|---|---|---|
|  <b>Operating Frequency Range</b><br>Standard 20 MHz - 22 GHz continuous,<br>options through 40 GHz |  <b>RF source</b><br>Textron Systems SSIs<br>Up to 8 SSIs per port |  <b>Testing</b><br>Direct inject or radiated testing               |
|  <b>Frequency resolution/accuracy</b><br>0.022°/1.7° RMS  |  <b>Spurs &amp; harmonics</b><br>-60 dBc (typ)/-55 dBc (max)       |  <b>Pulse repetition interval</b><br>512 ns to 1.0 s/20 ps+-1.0 ns |
|  <b>Noise floor</b><br>-90 dBm/MHz<br>(No signal present)   |  <b>Pulse width range</b><br>24 ns to 1.0 s/20 ps+-1.0ns           |  <b>Option</b><br>Wideband 1.1 GHz chirp option                    |
|   |  <b>Pulse density</b><br>Up to 16 MPPS                             |   |

## KEY FEATURES & BENEFITS

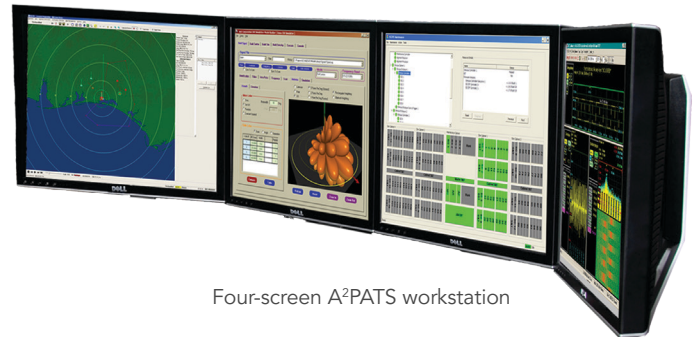
- Varying numbers of identical SSIs in each port enable stringent testing scenarios
- Simultaneous simulation of phase, amplitude and time angle of arrival
- Combining synthesizers enables pulse densities exceeding eight million pulses per second for complex signals and scenarios
- Easy setup, installation and relocation
- Designed for easy system expansion through addition of identical catalog commercial off-the-shelf SSI modules
- Reconfigurable architecture to meet test requirements
- Continuous, real-time background alignment for lower support cost and higher operational availability
- Allows for long-periods of simulation time with no external calibration procedures
- Continuous alignment keeps the system within tolerance.

## INDUSTRY'S FIRST DIRECT PORT EW SIMULATOR, SIZED FOR YOUR NEEDS AND BUDGET

The A<sup>2</sup>PATS Single-Cabinet System can house two enclosures with 8 SSIs each, up to 16 total SSIs. Each enclosure can be configured as:

- One port with eight RF sources
- Two ports with four RF sources each
- Four ports with two RF sources each
- Eight ports with one RF source each

Along with the same trusted performance of the larger configuration, the A<sup>2</sup>PATS Single-Cabinet System is sized appropriately for space-constrained areas and priced to fit more limited budgets.



Four-screen A<sup>2</sup>PATS workstation

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