

# Achieve Spectrum Superiority and Deploy Next-Gen EW Capabilities Faster

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Spectrum superiority has never been more critical to success on the battlefield. Amid an increasingly contested and congested electromagnetic spectrum, the ability to reliably operate CNS and Radar/EW systems, while deceiving and disrupting the adversary, creates a significant tactical advantage.

However, Electronic Warfare systems are experiencing technology disruption as active electronically scanned arrays, ultra-wideband technology, and cognitive systems present new design and test challenges.

Take control of your EW system test with NI's open, flexible, scalable, and high-performance test capabilities. NI's modular instrumentation and open software technologies give engineers the tools to deliver adaptable threat emulation with RF Vector Signal Transceiver modules and FPGA coprocessors. Scale your system-level validation to support multiple threat emitters per channel, monitor and analyze your system performance in real time, or record and playback sensitive signals securely, all on a common modular instrument platform.

In addition, Software Defined Radio (SDR) provides the ideal platform for developing and deploying electronic warfare systems and the flexibility to adapt to modern and constantly evolving threats. COTS technology is ideal for system-level test of complex, intelligent EW receivers, reducing the need for flight test hours by modeling and simulating a multi-emitter environment. COTS SDR also allows you to rapidly design and deploy systems that deny hostile access to the

electromagnetic spectrum, such as communications jamming and counter-UAS systems. You can leverage this platform to prototype systems capable of assured operation in contested and congested electromagnetic spectrums with techniques like cognitive radio and frequency hopping.

Create a modular, agile, and scalable approach to EW design and test, so you can rapidly deploy advanced capabilities and improve mission readiness.

Learn more in our [NI Solution Brochure](#).