



Test SAR mode on the ground to speed development

- Produce high-fidelity, realistic ground returns to the SUT
- Test spotlight SAR and SAR automatic target recognition (ATR) modes
- Identify radar jamming vulnerabilities with DRFM-based simulation option
- Test in a free-space environment or via direct-inject
- Generate scenarios in minutes with a robust, intuitive graphical user interface (GUI)



ARES-SAR is the first commercially available radar environment simulator to comprehensively test SAR mode by emulating real-world flight scenarios including ground targets, terrain, and SAR imagery.

HIGHLIGHTS

- Save millions of dollars in flight-costs and speed radar development by testing SAR capabilities in a lab, anechoic chamber or open range
- Simulate targets of interest on the ground to test SAR automatic target recognition and ground moving target (GMT) modes
- Quickly configure flight environments, targets, and threats via JETS software interface to verify radar SAR mode performance in multiple flight scenarios
- Observe radar performance during live emulation and make adjustments JETS software interface that displays data in real-time
- Identify radar jamming vulnerabilities with accurate emulation of validated, near-peer, ground and air EA threats using proven DRFM technology developed for more than 35 years in partnership with the U.S Air Force/Navy
- Expedite testing and isolate issues for monopulse and other intricate radars with optional direct-inject capability delivering 360 degrees of emulation without antennas

20-100 nmi
tacticle range

6.5-18 GHz
frequency response

35
years of matured DRFM technology leveraged

8
years in development

\$3M
minimum flight-test costs saved

TECHNICAL SPECIFICATIONS

Frequency Response: 6.5 GHz – 18 GHz (resolution of 1 GHz IBW).

RF input Power Levels: 0 dBm to -40 dBm

Tactical Range: 20 nmi – 100 nmi (minimum range limited by insertion delay through system)

JETS Graphical User Interface (GUI)

Compatible with Windows OS
Configuration options include: Doppler, range delay, pulse modulations for moving targets, atmospheric loss, ground and sea clutter, turbulence, weather and target reflections, RCS, glint, scintillation, multipath, target subscatters, electronic countermeasure techniques

Mechanical

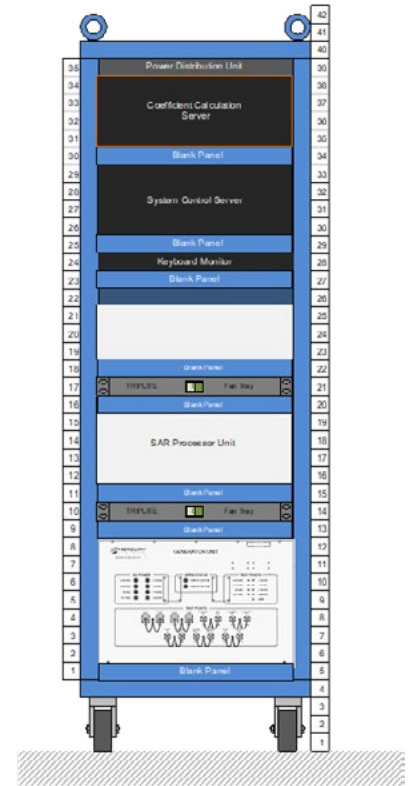
- Dimensions: Rack: 24" L x 19" W x 72" H
Power: 115 V AC 400 Hz 3Ø at 8A/Ø(max)
Weight: max 600 lbs

Environmental

- Operating Temp: 0°C to 35°C
Storage Temp: -20°C to 60°C
Relative Humidity: 20% to 80%
Max Altitude: 3000 m

Expansion Options

- ARES-3100 air-to-air simulator



ARES-SAR RACK CONFIGURATION



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