

KNOW BEFORE YOU GO.

MODEL 527 RADAR SIGNAL SIMULATOR

Providing confidence and reliability through electro-optic/infrared (EO/IR) and radio frequency (RF) test and training solutions.

The Model 527 provides free-space radiation functional testing capability to determine the status of electronic warfare (EW) radar warning receiver (RWR) systems in or on operational aircraft.

AAI's Model 527 provides organizational-level flight line verification of the operational status of the aircraft and its EW systems. This includes associated installed antennas, transmission lines, radomes, cockpit displays, and controls.

Providing multiple emitter (RF and IR) stimulations via free-space radiation, the Model 527 is used for end-of-runway and walk-around radiated RWR testing up to 120 feet (ft.) from the aircraft. The operational readiness of both EO and IR RWR systems and missile warning receivers is verified by threat reception and recognition as displayed in the cockpit. The performance of the avionics systems (B-kit) and its transmission paths (A-kit) are thereby verified to ensure operational readiness prior to launch.

Multiple emitter are/or scenarios or sequences are programmed off-line using a PC-based graphical user interface. Numerous simulations are possible, from simple signal emitters to complex multiplexed RF emitters along with EO/IR simulations.

Maintenance technicians on the flight line can execute pre-programmed test scenarios or sequences while engineers have full emitter editing capability to support test and evaluation exercises.

AAI's Model 527 emitters and scenarios are compatible for use with the AN/USM-670 Joint Service Electronic Combat Systems Tester, or JSECST, ensuring vertical testability and minimizing maintenance downtime.



Model 527 Radar Signal Simulator part number: 39300-40002-10

Frequency Range:	■ Fully tunable from 500 MHz to 18.6 GHz
Frequency Expansion:	■ 10 MHz to 18 GHz and 10 MHz to 18 GHz with two-millimeter microwave bands
Modulation Techniques:	■ Bi-phase, chirp, frequency, pulse width, and pulse repetition internal agility
Number of Emitters:	■ Eight, fully independent
Antenna Beamwidth:	■ > 10 degrees
Operating Range:	■ Typically up to 120 ft. from aircraft
Fully Programmable Scan:	■ Standard scan models with advanced waveforms
Flight Line Programming:	■ Menu-driven build emitter keypad entry
Off-line Programming:	■ Software development station
Power:	■ Universal AC, internal battery charger
Power Saving Feature:	■ Automatic power management
Batteries:	■ One or two, removable, long life, lithium ion
Battery Life:	■ Typically greater than six hours
Emitter Memory:	■ Rugged, solid state, removable memory module PCMCIA disk
Remote Operation:	■ Via modem or RS-232/RS-422
Environmental:	■ MIL STD 28800, Class I
Operating Range:	■ -40° to +55° C
Weight:	■ < 27 pounds with two batteries, < 25 pounds with one battery

Specifications subject to change without notice.

For further information and prices contact:

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