

MODEL 527™

RADAR SIGNAL SIMULATOR



Part Numbers:
39300-40002-10
National Stock Number:
6940-01-563-1116
Additional Part Numbers:
39300-40002-20
39300-40002-30
39300-40002-40
Specifications subject to change
without notice.

TEST & TRAINING & SIMULATION

PROVIDING CONFIDENCE AND RELIABILITY THROUGH TOTAL SPECTRUM TEST AND TRAINING SOLUTIONS

The Model 527 radar signal simulator is a handheld, portable device designed to determine the status of electronic warfare (EW) radar warning receiver (RWR) systems on operational aircraft through free-space radiation functional testing. The Model 527 delivers organizational-level flight line verification of the operational status of an aircraft and its EW systems. Operational readiness and threat recognition are verified from antenna to cockpit display. This includes antennas, transmission lines, radomes, cockpit displays and controls. The performance of avionics systems (B-kit) and transmission paths (A-kit) can be verified pre-launch.

TextronSystems.com



TEXTRON Systems

► PUSHING PAST POSSIBLE

MODEL 527 RADAR SIGNAL SIMULATOR

SPECIFICATIONS



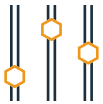
FREQUENCY RANGE

500 MHz to 18 GHz (base); 28 GHz to 40 GHz millimeter wave (mmwave); 10 MHz to 500 MHz (optional)



OPERATING TIME

Greater than six hours with two batteries installed



SCAN MODULATIONS

Fully programmable advanced modulations including circular, sector, spiral, conical and others



FREQUENCY ACCURACY

- +/-0.001 percent for single output; +/-5 MHz for multiple frequencies (base)
- +/-0.002 percent for single output; +/-20 MHz for multiple frequencies (mmwave)



FREQUENCY SWITCHING SPEED

One μ sec



TEMPERATURE

-40 to 55°C (AC power)
-20 to 55°C (battery power)



OPERATING POWER

BB-2590/U battery (one or two), or 110 to 240 V alternating current, 50 to 60 Hz



VERTICAL INTEGRATION

JSECST™ and A2PATS®



NUMBER OF EMITTERS

Eight, fully independent in frequency, pulse width, pulse repetition and scan model



MINIMUM PULSE WIDTH

50 ns



RADIATED POWER

-35 dBm minimum at 40 feet (base); -42 dBm at 40 feet (mmwave)



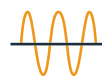
REMOTE CONTROL

Handheld controller or Ethernet



DIRECT CONNECT POWER

+10 dBm via threaded Neill-Concelman, or TNC, output (base)



FREQUENCY MODULATIONS

Bi-phase, chirp, jitter and hop



WEIGHT

Less than 27 lb with two batteries, less than 25 lb with one battery

The Model 527 can perform end-of-runway and walk-around testing up to 120 feet from the aircraft, depending on the receiver. Antennas and transmission paths mounted high on the aircraft can be verified without direct coupling. Our advanced threat modeling software allows threat emitters to be developed offline and stored on removable PCMCIA media, enabling the system itself to be unclassified when powered down with disk removed. The Model 527 supports up to eight simultaneous, multiplexed emitters, allowing the development of complex test cases and the verification of threat priority in the RWR system. Once emitters or groups of emitters are developed, test personnel can progress through them easily.