



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.

MODEL 527™ RADAR SIGNAL SIMULATOR

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.

TEXTRON Systems

Electronic Systems

124 Industry Lane, Hunt Valley, MD 21030 | 800.655.2616 | electronicsystems@textronsystems.com
www.textronsystems.com/es

MODEL 527

RADAR SIGNAL SIMULATOR

CHARACTERISTICS & BENEFITS



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



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



Operating time
Greater than six hours with
two batteries installed



Minimum Pulse Width
50 ns



Scan Modulations
Fully programmable advanced modu-
lations including circular, sector, spiral,
conical and others



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



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)



Remote Control
Handheld controller or
Ethernet



Frequency Switching Speed
One μ sec



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



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



Frequency Modulations
Bi-phase, chirp, jitter and hop



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



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



Vertical Integration:
JSECST™ and A²PATS™

PROVIDING CONFIDENCE AND RELIABILITY THROUGH TOTAL SPECTRUM TEST AND TRAINING SOLUTIONS.

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.

For information within the
United States, please contact:
Textron Systems Electronic Systems
124 Industry Lane
Hunt Valley, MD 21030
1-800-655-2616 or 410-666-1400
electronicsystems@textronsystems.com

For information outside the
United States, please contact:
Textron Systems Electronic Systems UK
16 Compass Point, Ensign Way
Hamble, Southampton Hampshire SO31 4RA
+(44) 2380455110
electronicsystems@textronsystems.com

TEXTRON Systems