

MODEL 627

RADAR SIGNAL SIMULATOR



Part Number:
40638-40000-10
Laboratory Model 627
Part Numbers:
40638-40000-20 (Front)
40638-40000-30 (Rear)
Specifications subject to change
without notice.

PROVIDING CONFIDENCE AND RELIABILITY THROUGH TOTAL SPECTRUM TEST AND TRAINING SOLUTIONS

The Model 627 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 627 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

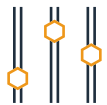
MODEL 627 RADAR SIGNAL SIMULATOR

SPECIFICATIONS



FREQUENCY RANGE

100 MHz - 18 GHz; 26 - 40 GHz



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)
- +/- .05 percent for multiple frequencies (mmwave)



FREQUENCY SWITCHING SPEED

5 μ sec
200 μ sec single



TEMPERATURE

-20 to 55°C (Operating)
-20 to 71°C (Non-Operating)



OPERATING POWER

14.4-volt rechargeable lithium-ion battery (one), or 110 to 240 V alternating current, 50 to 60 Hz



FREQUENCY RESOLUTION

100 KHz (single)
1 MHz (multiple)



NUMBER OF EMITTERS

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



MINIMUM PULSE WIDTH

50 ns



RADIATED POWER

-45 dBm at 40 ft, -50 dBm at 40 feet (mmwave)



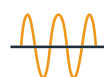
REMOTE CONTROL

Run via Ethernet



PHASE NOISE

-60 dBc at 10 kHz offset at 9 GHz carrier



FREQUENCY MODULATIONS

Bi-phase, chirp, jitter and hop



WEIGHT

Less than 22 lbs with one battery (10kg)

The Model 627 can perform end-of-runway and walk-around testing at extended distances. 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 media, enabling the system itself to be unclassified when powered down with media removed. The Model 627 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.