AIR | LAND | SEA | PROPULSION | WEAPON SYSTEMS | ELECTRONIC SYSTEMS | TEST, TRAINING & SIMULATION

# **LAB MODEL 527**<sup>m</sup> RF Simulator





Part Numbers: 40504-40000-10 40504-40000-20 40504-40000-30 (Front-mounted connectors) 40461-40000-20 (Rear-mounted connectors) Specifications subject to change without notice.

#### PROVIDING CONFIDENCE AND RELIABILITY THROUGH RADIO FREQUENCY (RF) TEST SOLUTIONS

The Textron Systems Lab Model 527 RF simulator is a compact, high fidelity system designed for electronic combat systems testing. Sized for a 19-inch rack to accommodate a laboratory environment, the Lab Model 527 also can be utilized as an RF generation subsystem in a high-power system.





**PUSHING PAST POSSIBLE** 

## LAB MODEL 527 RF SIMULATOR

#### SPECIFICATIONS



#### FREQUENCY RANGE

Fully tunable for continous-wave and pulsed emmiters from 10 MHz to 18 GHz, and from 28-40 GHz



#### **MODULATION TECHNIQUES**

Bi-phase, chirp, frequency, pulse width and pulse repetition agility through standard models and user-defined modulations



#### NUMBER OF EMITTERS

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



#### FULLY PROGRAMMABLE SCAN

Standard scan models with advanced waveforms including circular, sector, spiral and conical



#### AC POWER

50-60 Hz; 90-264 V using a lab-standard cable equipped with a three-prong IEC-320 C14 for connection to 60 Hz, 120 V alternating current (VAC) outlets



#### MAXIMUM CURRENT DRAW

1 amp at 115 VAC or 0.5 amp at 230 VAC



#### CONTROL AND OPERATION Ethernet



**TEMPERATURE** Operating: 0 to 40°C Non-Operating: -20 to 70°C





**WEIGHT** Less than 30 lb



**RF OUTPUT POWER** Zero dBm



MINIMUM PULSE WIDTH 50 ns



MINIMUM PULSE REPETITION



### FREQUENCY ACCURACY

± 0.002 percent single frequency output; ± 20 MHz for multiple frequency output

As a complement to other established Textron Systems lab assets, such as the Advanced Architecture Phase, Amplitude and Time Simulator (A2PATS®) and Lab Joint Service Electronic Combat Systems Tester (JSECST™), the Lab Model 527 contains a fully programmable stimulus system with vertical test integration to both the A2PATS and Lab JSECST. Its emitters also are compatible with the AN/USM-670 JSECST, A2PATS and Lab JSECST, further enhancing vertical test capability and minimizing programming time. The Lab Model 527 is rendered unclassified after power-down, which removes all data from RAM, and also remains unclassified during periodic maintenance, training, calibration or alignment.

RF connectors provide standard RF power output, and may be located on either the system's front or back. Multiple emitters, scenarios and/or sequences are programmed offline using a personal computer, or PC, based graphical user interface. Numerous simulations are possible, from simple signal emitters to complex, time multiplexed RF emitters.