

## What is SPECTRE?

Software Programmable EW & CEMA Threat Representative Environment (SPECTRE) is a complex threat environment simulator that provides the capability to reproduce known military threat signals in the HF, VHF, and UHF frequency bands including cellular (CDMA, GSM, TDMA, 3G, 4G, LTE) as well as GPS-specific threats.

SPECTRE produces and transmits realistic representations of military threat signals used for both laboratory (injected signal) and outdoor testing (over-the-air-transmission).

Waveform(s)/Signal(s) are selectable from a comprehensive library of known threats using an intuitive graphical user interface (GUI).

SPECTRE provides a lab variant version that supports bench top lab testing and a field variant that transmits threat signals in open air range testing.







# RF Output Configuration

Frequency Range — 20 MHz – 18 GHz

Channels — x1, x2, or x3

Switchable Output — Load / Antenna / Test

RF Power Output — 100 Watts Linear / 250 Watts Saturated

### Signals & Waveforms

Instantaneous Bandwidth — Configurable up to 100 MHz Signal Types — AM, FM, PM, FSK, PSK, GNSS, BPSK, QPSK, CW, Comb Digital Signal Generation — File Playback / Digital IQ Stream

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# Key Highlights

SPECTRE allows the end user control over the amplitude, phase, and frequency of transmitted signals. This is done by adjusting common modulation parameters. Once a waveform is configured, the end user can generate a spectrum preview. Multiple waveforms can be generated and saved to file as a list of configurable parameters.





The intuitive SPECTRE UI has two primary modes, Creator and Operational. In Creator mode, the user generates waveforms, power profiles, and band restrictions. In Operational mode the user selects the pre-defined waveforms and profiles to transmit. The system automatically notches any signal that overlaps with restricted bands, allowing users to sweep power onto a system under test.

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# Status, Monitor & Log

Active Feedback — Configuration and Status Channels — Forward / Reverse / VSWR Switchable Output — Small Signal Waveform Verification RF Power Output — Event & Audit Logs to TXT and CSV

# Size, Weight & Power

Size, Weight & Fower	
Control Case ————————————————————————————————————	9U / 180.2 lbs.
Low Band Amplifier Case ————	7U / 146.9 lbs.
Mid Band Amplifier Case ————	7U / 146.9 lbs.
High Band Amplifier Case ————	7U / 181.3 lbs.
Power Conditioner Case ————	3U / 126.1 lbs.
Accessories Case ——————	21.9" x 14.5" x 51" / 79.2 lbs.
AC Power Input —————	120 VAC @ 4644 Watts

# Contact Us

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