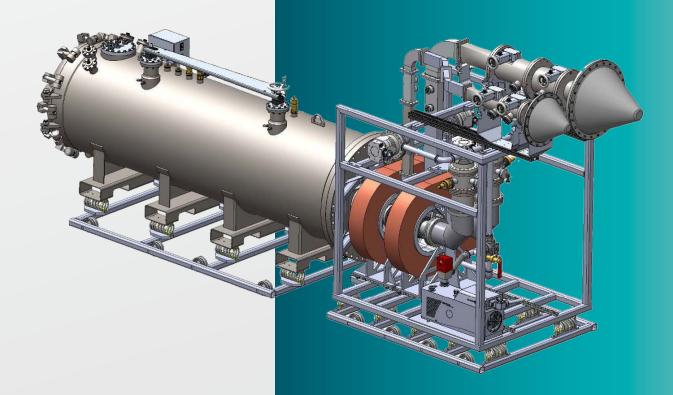


STES

S-Band Threat and Evaluation Source

UNIQUELY AGILE HPM SOURCE SYSTEM FOR STANDALONE TEST AND EVALUATION.







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UNIQUELY AGILE HPM SOURCE SYSTEM FOR STANDALONE TEST AND EVALUATION.

S-Band Threat and Evaluation Source (STES) is a standalone, agile, High Power Microwave (HPM) capability to assess military systems for vulnerability against S-Band HPM threats or collateral damage. STES incorporates two continuously tunable RF magnetrons to vary the operating frequency covering a large portion of S-band (2-4 GHz). In addition, there are non-invasive features to select between vertical, horizontal, or circular polarizations as well as adjust the RF pulse width to quickly adapt to different source parameters. The system design supports outdoor range, chamber, or remote site testing with minimal support systems (power and basic environmental protections).

KEY FEATURES

- Continuously tunable across a large portion of the S-Band (2-4GHz) with the two sources.
 Additional sources increase the useable band.
- Tunability adjustment can be performed rapidly and remotely.
- Selectable pulse width between 60, 80, 120ns.
- Pulse width adjustments are external and do not require replacement of voltage insulation mediums.
- Selectable polarization, between linear horizontal, vertical, or circular
- System is designed for high reliability and minimal logistics to operate for Test and Evaluation (T&E) environment.
- Customizable for stakeholder's needs.

SYSTEM USE CASES

STES is a configurable HPM emitter used to radiate military systems to an S-band RF energy across a range of frequencies, pulse widths, and polarizations to mimic a variety of threat or collateral systems. The test articles are then assessed for vulnerabilities accordingly. The system is primarily intended for outdoor range testing, however it is transportable for chamber or remote range testing with minimal support equipment; primary input 208 VAC power, and basic environmental protections.

CONTACT INFORMATION

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KEY PERFORMANCE SPECIFICATIONS

| SPECIFICATIONS | VALUE |
|--|--|
| HPM Frequency Band | S-Band (2–4GHz) |
| Frequency Tunability Range | >50% of Full Band (Greater with additional sources) |
| Frequency Tunability Increment | Continuous |
| Electric Field at Target | >12kV/m @ 10m |
| 3dB Spot Size | 12m² @10m |
| Polarization Adjustment | Linear Vertical, Linear Horizontal, or Circular |
| Pulse Width Adjustable Range | 60, 80, 120 nsec ranges |
| Pulse Repetition Rate Adjustable Range | Single Shot to 20 Hz |
| Pulse Burst Capability | ≥10 Pulses |

