

CAES PIONEERING
ADVANCED
ELECTRONICS

Communications, Navigation and Identification

Supporting the Warfighter



CAES Communications, Navigation and Identification Solutions Protect the Warfighter



CAES Communications, Navigation and Identification (CNI) technologies support a wide variety of systems, enabling clear narrowband communications when warfighters need it most by providing precision situational awareness and threat identification. CAES' robust designs and manufacturing techniques help assure secured connectivity during your most critical missions.

CAES CNI technologies extend system sensitivity and range, enabling warfighters to identify threats at a distance and respond appropriately. Our broad portfolio of solutions across a wide frequency range ensures a proper technical fit for every mission.

An emphasis on low size, weight, and power (SWaP) allows us to design innovative solutions that work within challenging form factors. When mission requirements lead to challenging SWaP constraints, CAES is the industry's leading partner for SWaP optimization. CAES provides high performance, compact, rugged RF filters for radar, electronic warfare, and missile applications. Our offerings include:

- Small Custom Form Factors: High-performance solutions with unique form factors for challenging applications such as space, missile and unmanned aerial vehicles.
- Alumina Thin Film: Small, modular circuit assemblies, low RF loss, gold-plated ground vias, precision printed features, reduced cycle time and field reliability.
- Chip-and-Wire Bare Die: Increased integration allows for size and weight reduction as well as improved power management, reliability and lower cost.

For over 40 years, CAES has remained one of the premiere suppliers of advanced antenna systems to the US and NATO governments, commercial integrators and manufacturers. Equipped with in-house antenna test ranges and extensive environmental test capabilities at multiple sites, CAES can address challenging customer requirements for a variety of CNI applications including:

- Broad frequency and communications band support
- Terrestrial and space-based navigation
- Telemetry and datalink functionality
- Identification Friend or Foe (IFF) systems





CAES Products for CNI

- Antennas
- ASICs
- Cable Assemblies
- Motion Control
- Power Devices and Power Conversion
- Precision Positioning Systems
- Radiation Hardened Solutions and High Reliability Components
- RF Assemblies and Subsystems
- RF, Microwave and Millimeter Wave Components
- Rotary Joints
- Waveguides/3D Printed Waveguides



CAES Manufacturing Solutions for CNI Applications

In addition to a complete product offering for CNI applications, CAES offers a variety of specialized services.

Advanced Engineering Services:

- Additive Manufacturing/3D Printing
- SWaP Optimization
- High Reliability
- High Power
- High Frequency
- SOSA™/MOSA

Testing and Tuning Services:

- Automated Testing
- Environmental and Dynamics Testing
- High Power Test Solutions
- Antenna Test Ranges

CAES Manufacturing Services:

- Advanced Automated Assembly
- Advanced Packaging
- Build-to-Print/Build-to-Spec
- Electronic Manufacturing Solutions
- Microwave through Millimeter Wave Solutions



From high frequency through millimeter wave, CAES products and services ensure that your system can address any need, anywhere, anytime, all the time.



We engineer
solutions for
the world's
most critical
missions.