

Advanced Electronics for Critical



## **CAES Technologies and Services Enable the World's Leading Radar Systems**



For more than 40 years, CAES radar solutions have enabled missile defense systems to maintain their vigilance, augmenting fighter pilots' situational awareness and helping to keep the flying public safe and comfortable in the air. CAES technologies optimize system sensitivity, power and range, enabling warfighters to identify threats at a distance and respond appropriately.

Our robust design and manufacturing capabilities ensure reliability for never-fail missions while an emphasis on low size, weight and power (SWaP) with chip-scale, high-density packages enable innovative solutions for challenging applications.

CAES provides antennas, RF and microwave components and subsystems for a variety of advanced radar applications. Our extensive, precision technology and market know-how include expertise in modern radar architectures, radar detection, real-time discrimination, tracking, limitations and signal processing algorithms and their performance across multiple applications. CAES also supports early warning radar using Ka-Band and W-Band frequencies, incorporating our broad technology portfolio and an integrated aperture-to-data architecture.

CAES is a leading designer and manufacturer of custom radar antenna positioners for military airborne, ground, and naval applications.

CAES Radar Antenna Positioners are based on military-qualified designs, and provide optimal performance within customer SWaP constraints. For surveillance applications, typical frequency coverage is from L-Band to X-Band. Key features include:

- · Selectable modes
- High precision direct drive technology for high accuracy and high speed scanning
- Integral control electronics
- High reliability
- Integral RF networks

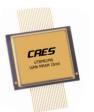
A broad portfolio of intelligent, adaptable solutions across a wide frequency range ensures a proper technical fit for every mission. From high-frequency through millimeter wave, operating across the land, sea, air and space domains, our products and services can address any radar need, from air traffic control, to synthetic aperture radar, fire control, and space situational awareness.





## **CAES Products for Radar Applications**

- 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 Radar Applications**

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

### **Advanced Enginering Services:**

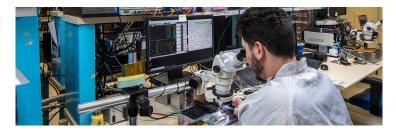
- Additive Manufacturing/3D Printing
- SWaP Optimation
- High Reliability
- · High Power
- · High Frequency
- · SOSA/MOSA

### **Testing and Tuning Services:**

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

#### **CAES Manufacring Services:**

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



CAES technologies enable system sensitivity and range, enabling warfighters to identify threats at a distance and allowing them to respond appropriately.



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

