The Sierra Nevada Corporation (SNC) AE-4500 System provides small form factor radar detection and collection capabilities designed for installation onto small airborne platforms requiring reduced size, weight and power solutions.

WARNING – Exports, sales, and offerings of the products and technologies discussed herein are subject to U.S. Government approval.
The AE-4500 System detects, identifies and locates modern radars. Its mature, field-proven hardware and software has been installed and flown on small UAV, turboprop and business jet platforms. It is configurable for operations over multiple frequency ranges using a variety of antenna arrays, and is small enough to support wingtip antenna installations for optimal field-of-view coverage. The AE-4500 System is a stand-alone collection and processing system that includes all antenna, RF and digital signal processing hardware and software needed for on-board emitter detection, deinterleaving, identification, geo-location, correlation and reporting. Available options support frequency extension, additional antennas and distributed installations for larger platforms. The open architecture design includes firmware and software applications for pulsed and low powered LPI emitters. Ground Processing Exploitation and Dissemination (PED) software controls airborne collection and provides situational awareness for users.

In-Air Signal Processing

- Remote Control from ground through datalink
- Interfaces to Platform INS/GPS for NAV data
- Detection, identification and location of pulsed, CW, FMCW and LPI emitters
- On-board emitter deinterleaving and emitter identification
- On-board emitter geolocation, correlation and reporting
- Provides single-ship geolocation and supports multi-ship geolocation by triangulation or TDOA methods
- Pre-Mission Planning Tools allow users to create and optimize Scan Plans and Emitter Databases
- Post-Mission Analysis Tools allow users to play back, sort, isolate and examine recorded data