

X-Band Transmit/Receive Modules for Border Surveillance

Smart Surveillance with Low Cost, Plug-and-Play AESA

The task of securing a national or local border is always challenging. Whether the targets are small vessels on the water, aircraft or even people crossing borders on foot, border surveillance needs to be reliable, scalable and be able to endure prolonged exposure to harsh environments and remote locations. Size, Weight, Power and Cost are also critical business considerations for solution selection. Spectrum Control delivers the solution.

The Main Element of an AESA Radar System

Many border surveillance systems in operation today are using outdated analog solutions that are not able to meet the evolving needs of modern Border Patrol in terms of flexibility, reliability and performance. Spectrum Control's approach allows Border Patrols to upgrade to phased array radar solutions in a cost-effective way by using a 'common module' methodology.

Available in various bands and product configurations, our Quad Transmit Receive Module forms the main element of an AESA radar system.

This approach includes ease of system integration and reduced cost of ownership through comprehensive built-in diagnostics and plug-and-play architecture eliminating the need for re-calibration at first line repair.



Product Details

Spectrum Control's Quad Transmit/Receive Module (QTRM) solutions for Active Electronically Scanned Array (AESA) radar applications offer a unique and innovative solution for high performance, high level transmit/receive solutions for the development of active antenna array systems and sub-systems, featuring:

- Shorter time to market and simple integration COTS solution
- Temperature compensated modules (we also offer a cooling solution for larger arrays)
- "Smart" radar features including array configuration "on the fly", comprehensive BIT and "self healing" of the array
- Consistent and reproducible array manufacture through use of standard factory calibrated modules

