ARES RADAR

THE AFFORDABLE AESA

UPGRADE from a mechanical scanned system. All the AESA benefits, at a fraction of the price.

- ★ Versatile installation with compact, high-performance computing in 3U VPX
- ★ Scaled to Fit; Scaled to Perform
- ★ Price point far less than the competition
- ★ Open standards technology
- ★ Customizable for a variety of fighter and trainer aircraft

TECHNOLOGY AND CAPABILITIES

- ★ Adaptable to various airframes
- ★ Cutting-edge high power density GaN devices
- ★ Integration with Duotech's proven radar processor
- ★ Built for total cost of ownership advantage
- ★ User-customizable interface
- ★ Target report hand-off to other systems
- ★ Debrief with actual terrain and weather
- ★ Full integration tool suite
- ★ Prioritized threat model search modes
- ★ Passive search capable

RECEIVER / PROCESSOR

Receiver/Processor

» Adaptive processing and channel analysis

» Open architecture hardware design (e.g. VPX VITA, AXIe, 802.3, MIL-STD-1553, ARINC-429, and other standards)

» Standards-based tools and languages (VHDL, C#, Java, Matlab Coder)

» Modern processing techniques for legacy platforms

» Integrated master display and user interface when central computer unavailable

» User installable application

» Feature extensions

R/T ANTENNA

R/T Antenna

» High efficiency Gallium Nitride, GaN, amplifiers

» Scalable R/T "slice" building blocks allow a wide variety of antenna configurations to fit multiple aircraft or pod configurations

» Designs for any mission or budget

» Modular technology for ease of maintenance

» Ultra high MTBF

» Air or liquid cooled options

» Combination of active and passive element designs available

TECHNICAL SPECIFICATION

ARES	PN 3600700, 5.4kVA, 80kg
	Alternate designs: 2.4kVA-6.8kVA, 62kg-89kg
Frequency	X Band
Cooling	Air or Liquid
Key Interface	Ethernet

MODES AVAILABLE

Air-to-Air Modes	Long Range Nose Aspect All Aspect Search Track While Scan Single Target Track
Air Combat	HUDACQ Boresight Helmet Mounted Cueing VERTACQ
Air-to-Surface Modes	Real Beam Doppler Beam Sharpening Sea Surface Search and Track GMTI (Optional)
Interleaved Modes	Customer Configurable Interleaved Air & Surface Modes
Extended Functionality	Helmet mounted cueing Tactical data link EW system (jamming) integration IRST position handoff Weather Awareness Mode

RADAR DISPLAY AND INTEGRATION

ARES leverages the same Processor LRU as Nemesis RADAR, which has been integrated with a modern mission system software and cockpit in the Tactical Air Support F-5 Advanced Tiger™. ARES tactical RADAR interface gives a vast array of control, display, and configurability options.

ARES is fully configurable to meet even the most challenging SWaP-C restrictions on 3rd and 4th Generation Aircraft and interfaces can accommodate a variety of mission systems, display types and controls.