



# Advanced Threat Warner (ATW) Missile Warning System

Designed for Transport, Fighter, Rotary Wing and Unmanned Aircraft Systems

The Northrop Grumman Advanced Threat Warner (ATW) system is the world's most capable multi-function/multi-spectral warning sensor. The ATW is designed for use on helicopters, fast jets, tactical and wide body transport aircraft and Unmanned Aircraft Systems.

ATW offers unprecedented 4-in-1 functionality: missile warning capability, hostile fire indication, laser warning and situational awareness. In all applications, this lightweight system provides outstanding clutter rejection, missile detection, and accurate hostile fire warning, to include point of origin and increased visual situational awareness capabilities, via a heads-up display (HUD) or other cockpit presentation.

Designed for high performance protection, the ATW outpaces legacy warning systems by providing passive detection and rapid classification as a threat followed by information to the countermeasures system for an optimum response. Advanced technology permits detection of hostile fire and unguided munitions ranging from small arms to rocket propelled grenades. The built in laser detectors provide valuable warning to aircrews from threat designators, range finders and beam riders.

The ATW can be interfaced to a chaff/flare countermeasures dispenser system (CMDS) or integrated as part of a directional infrared countermeasures (DIRCM) self-protection suite. With its adaptive open-system design, all applications can use common hardware and software. System simplicity allows for internal airframe installations or external mounting in a pod or pylon.

## Demonstrated Benefits

- High sensitivity for extended detection range
- 2-Color Infrared technology optimized to reject non-threat clutter sources
- Cutting edge software provides a high probability of detection while minimizing false alarms
- Full specification performance across entire FOV
- Hostile fire indication uses high-speed frame rates to detect small arms, anti-aircraft artillery and rocket propelled grenades
- No mission reprogramming required
- Extensive live fire testing and development program
- Extremely fine angle of arrival provides precise threat location
- Form, fit compatible with our legacy sensors

### System Description

The Advanced Threat Warning system consists of one to six high resolution multi-function/multi-spectral sensors and one processing unit. A unique and compact design approach results in a system with the lowest size, weight and power (SWaP) requirements.

A comprehensive built-in-test capability, in conjunction with high system reliability allows for implementation of a low life-cycle cost approach that matches perfectly with a two-level maintenance concept.

The ATW can be employed in an autonomous or integrated method of operation. The system can operate as a stand-alone subsystem within an aircraft's defensive suite with information displayed on an existing multi-function display.

The ATW can also function as a federated system with another electronic warfare controller as the pilot interface.

Northrop Grumman can provide a customized installation that is best able to meet your specific platform, mission and budget requirements.

LRU	Length (in)	Width (in)	Height (in)	Weight (lb)	Power (W)
Sensor	6.6	3.5	3.5	4.9	90
Mini Processor*	9.0	5.0	2.0	5.0	90

\*In Development

