ADS
Advanced Defense Systems, Inc.

TIFCS

TOW Integrated Fire Control System

The ADS TOW Integrated Fire Control System (TIFCS) has been developed to meet the international demand for armored vehicles which can accurately fire main guns with high first round hit as well as fire long range anti-tank missiles. Key components within the TIFCS have been tested and approved by allied nations to track/guide the entire TOW family of missiles.

Performance and operational enhancements over existing fielded systems include significantly improved thermal image quality, high reliability, high-integration, seamless operation, advanced man-machine interface, advanced, long-range ELRF, TOW Night Sight with range performance to maximum range of TOW missiles, Low-light-level CCD camera allowing visibility during thermal crossover periods, and improved 1st round hit performance with advanced ballistic computer. The ADS TIFCS has been designed to meet the needs of the warfighter and provide an anti-armor capability that can be depended upon under most battlefield conditions for decades to come.

FEATURES:

Advanced Gun Targeting System

- Ballistic computer
- Eyesafe Laser Rangefinder (ELRF)
- HD, low-light-level CCD Camera
- Latest Generation Thermal Sight

Proven TOW Targeting and Guidance components

- Enhanced Day Tracker: based on Optical Sight System (OSS) day tracker with auto alignment
- Advanced TOW Night Sight: 2nd generation with range performance to maximum range of TOW missiles, based on testing in 2011 and 2012 at the at an approved military test facility, and during other in-country demonstrations with international customers.
- Digital Missile Guidance Set (DMGS): using latest software

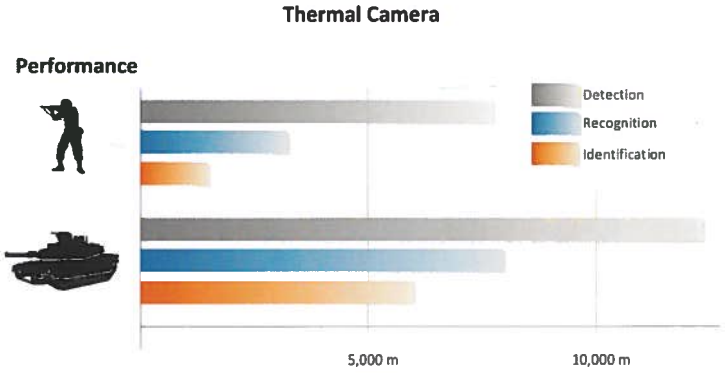
Since the 1980s, ADS has produced over 5,000 Fire Control Systems for armored and lightly armored vehicles and has been in continuous production and remains the sole manufacturer of the AN/UAS-12 TOW 2 Night Sight Equipment Set with over 16,000 of them delivered to U.S. Government and International customers. This experience coupled with an understanding of customer requirements enabled ADS to develop the TIFCS with components that provide performance and operational enhancements over existing fielded systems.

The ADS TIFCS has been designed to use the most reliable components available and packaged to work together seamlessly inside of any turret, meeting the needs of the Warfighter. TIFCS provides an anti-armor capability that can be depended upon under most battlefield conditions for decades to come.

Technical Information

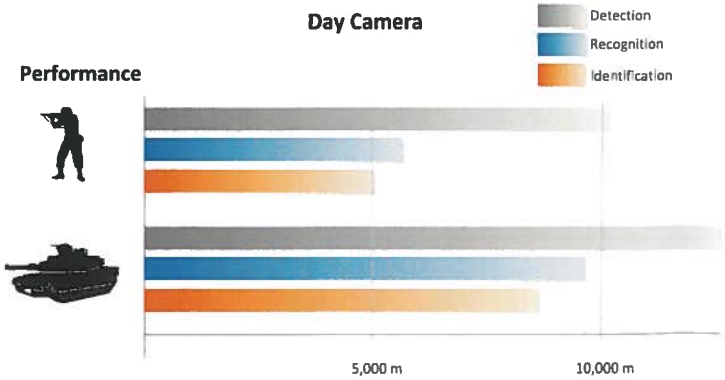
Thermal Camera

- Thermal Wavelength: 7.7 to 10.5 microns
- NFOV: 1.1 x 2.2 – degrees (V x H)
- WFOV: 3.4 x 6.8 – degrees (V x H)
- Cooling: Integrated Stirling linear drive cooler
- Video Out: RS-170
- Interface: RS-422 Comm; TOW DMGS



Day Camera

- Wavelength Sensitivity: 400 to 1100 nm
- Light Sensitivity: Low Light though Dusk and Dawn
- NFOV: 1.25 x 2.2 degrees (V x H)
- MFOV: 2.5 x 4.4 degrees (V x H)
- WFOV: 7.5 x 13.2 degrees (V x H)
- Video Out: Digital
- Interface: RS-422 Comm; TOW DMGS



Eyesafe Laser Rangefinder (ELRF)

- Eye Safety: Class 1 Eyesafe
- Rep Rate: 1-Hz Continuously
- Range to NATO Target: 6-km in 6 km visibility
- Range to 10x10 meter Target: 10-km in 15 km visibility
- Multi Target Logic: First/Last
- Multi Target Discrimination: 20 meters
- Range Accuracy: +/- 2 meter RMS

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