



AMPS

Airborne Missile Protection System

AMPS

The Airborne Missile Protection System is a flexible stand-alone off-the-shelf self-protection suite for helicopters and fixed-wing aircraft.

It is capable of combining different kinds of warning sensors, countermeasures and other avionic equipment in order to protect the platform and its crew against a variety of threats as e.g. infrared, laser or radar guided missile threats. Its modular design allows AMPS to be easily adapted and configured to the specific operational needs and for different mission profiles.

Our self-protection systems are in operational use on more than 700 military and VIP platforms for various customers worldwide.



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The Threat

It is recognised that there is an ever increasing level of hostile threats to Aircraft and Helicopters in both military operational and civil scenarios globally. According to estimates there are more than 500,000 shoulder launched surface to air missiles, Man-Portable Air Defence Systems (MANPADS) on the international market and due to conflicts many of these systems are now in the possession of non-state organizations and terrorists.

Even though a high percentage of aircraft losses in the most recent hostilities were caused by Infrared, Surface-to-Air Missiles (IR SAMs), laser and radar threats are increasingly prevalent in theatre of operations. To reliably detect these, AMPS can be augmented by laser and radar warning systems in order to guarantee the best possible protection through timely detection.

AMPS – The modular design

Dependent on the individual customer's needs and their distinct operational requirements, different configurations of the AMPS self-protection capability can be realised by combining selected sub systems to deliver a desired effect. Sub systems which could be integrated into AMPS are, a Missile Warning System (MWS), a Laser Warning System (LWS), a Radar Warning System (RWS) a Counter Measure Dispenser System (CMDS), a Directed Infrared Countermeasure (DIRCM) an Inertial Attitude System (IAS) and a Control and Display Unit (CDU) for system operation.

CDU – The Control and Display Unit

The CDU performs the EW Controller function and serves as the control and display element for the complete self-protection system. In addition it provides the functions of a sequencer for the Counter Measure Dispenser System (CMDS) of AMPS.

MILDS AN/AAR-60 - Facing IR-guided Threats

The MILDS AN/AAR-60 is a passive Missile Warning System (MWS) and designed to detect, track and provide warning of threatening missiles at maximum range. The high resolution of MILDS allows rapid discrimination of stationary and moving UV point sources. This feature permits MILDS to operate in both urban and battle-field environments with a minimum of false alarms. Optionally MILDS Block 2 can be featured with HFI. It helps to detect incoming tracer ammunition, determine where the hostile fire comes from and which evasive manoeuvres are the best.



Key features

AMPS

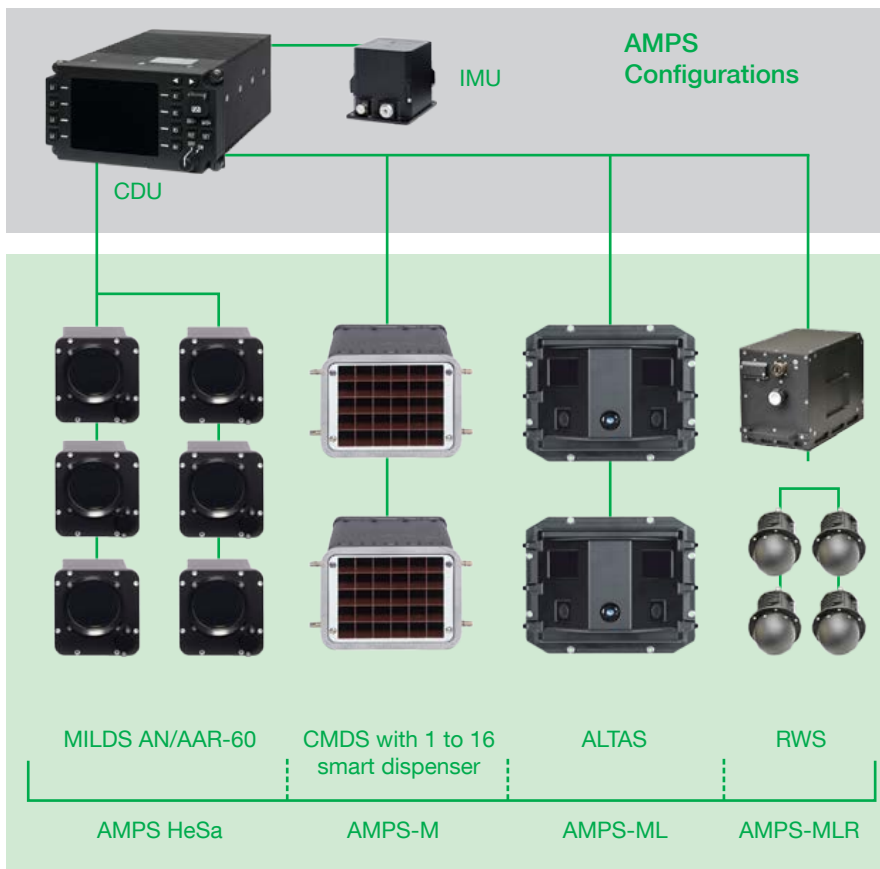
- Modular system architecture for individual operational needs
- A combat proven system
- Lowest number of equipment
- Easy installation / integration
- Complete Stand-Alone-Self-Protection-System
- No interfaces to mission or avionic systems required
- Very low weight and power consumption
- High reliability
- ITAR-free

MILDS

- Passive, true imaging, UV solar blind sensor device
- Hostile Fire Indication (only with MILDS Block 2)
- High spatial resolution
- Multi-threat handling (up to 8 per system)
- High probability of detection and a very low FAR
- Difficult to deceive
- No emissions from the sensors (stealth)
- No cooling, short activation time
- DIRCM compatible angular accuracy

ALTAS-2Q(B)

- Detects Laser Range Finder (LRF) and Laser Target Designator (LTD) threats
- Detects Laser Beamrider (LBR) threats (only with ALTAS 2QB)
- Very high sensitivity especially of the beamrider detector
- 360° coverage with only 2 sensors - low number of LRUs
- Multiple simultaneous detection and tracking of up to 4 threats
- Identification of laser type via library



ALTAS - Facing laser-based Threats

Though laser-guided weapons and in particular laser-beam rider (LBR) anti-aircraft missiles might still be regarded as part of state-owned arsenals, the general trend is a wide distribution of laser applications, also in current conflicts. The ALTAS Laser Warning System (LWS) is a passive LWS that is designed to detect, track and provide warning of hostile laser sources – such as laser target designators, laser range finders and laser beam rider (only ALTAS- 2QB) – aiming at the platform. Due to the high sensitivity of its beamrider detector, ALTAS-2QB provides in-time warning for counter-measures against beamrider threats (e.g. flight manoeuvres). Only two ALTAS sensors per system are needed for a 360° coverage.

RWS - Facing radar-based Threats

The RWS is a small, rugged and light weight Radar Warner System suitable to provide utility and combat aircrafts and helicopters with self-protection capabilities. It is able to reliably intercept, analyse and identify radar signals, and determine the relevant directions of arrival, even in operational scenarios characterized by high density electromagnetic environments.



AMPS – never fly without it.



AMPS has been selected for numerous platforms like CH-47, C-130, CH-53, EH101, UH60, Mi-8, Mi-17, Mi-171, H145, EC155, EC635, Cougar, Puma, Panther, Bell 407, P3C, Cessna 208, King Air 200.



Detect and Protect.

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