



Self Protection Radar Electro Optic System (SPREOS) DIRCM

Enhanced platform protection with virtually zero False Alarm Rate and optimized jamming techniques

SPREOS provides enhanced protection against the immediate threat of MANPADS for a wide-range of airborne platforms, ranging from small helicopters to large transport aircraft.

SPREOS integrates multiple functions including threat detection and confirmation, tracking and jamming of advanced IR guided missiles into a single Line Replaceable Unit (LRU).

As soon as a warning is received from the onboard Missile Warning System (MWS), SPREOS immediately pivots in the direction of the incoming threat and activates the dual band radar function for confirmation and tracking, which are performed simultaneously on both frequencies. Following the confirmation and tracking, SPREOS deploys the dual-band countermeasure laser causing the missile to miss the aircraft.

SPREOS is the most advanced DIRCM solution in the market that ensures enhanced protection of your aircraft against any type of MANPADS





Unique SPREOS Capabilities:

- Virtually Zero False Alarm: Ensures only real threats are declared by the system through effective filtering for all known nature and man made types of false alarms
- Optimized Jamming Technique: Collects specific threat information (velocity, distance) and calculates its time-to-impact, enabling an optimized jamming technique
- Threat Tracking Assessment: Constant threat tracking to assess whether the missile has been successfully deviated and measures the level of effectiveness of the protection
- Seamless Integration: Integrates with any legacy MWS using patented incoming threats acquisition via dual band radar technology
- Single LRU: The most compact and lightweight solution in the market
- Simple Installation: Simple and easy installation on all types of platforms



Features	Benefits	Value
Compact size, weight and power Single LRU without fuselage penetration	Ideal for any platform, easy installation & maintenance	33 cm (H) & 25 cm (D) <13 kg <600 W in active state <200 W in passive state
Open Architecture with dual band radar	Connects to any MWS, passive or active. Fast confirmation time.	L-Band & Ka-Band
Dual Band Laser based on Quantum Cascade Laser (QCL) technology directly coupled with the Radar for minimal errors	Maximum laser energy on the threat	Band I and Band IV
Practically zero FAR, the only DIRCM with threat confirmation and false alarm rate reduction functionality	Minimizes alarms to the pilot, Complies with EASA/FAA regulations	Less than 1 False Alarm per Thousands of Activations
Full coverage and exceptional response speed	Reducing blind zones	Az: 360° El: (+20°) to -100°
Fully certified and complies with the most demanding Civil Aviation and Military standards.	High reliability and safety	MIL-STD-810G/461F/704B DO-160E/178B/254 IEEE C95.2003 IEC 60825-1

SPREOS - More than a DIRCM



BIRD
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