LEDS-50 MK2

THE INTELLIGENT SOFT KILL SOLUTION

Land Electronic Defence System (LEDS) 50 MK2 is an integrated, modular, entry level active defence system consisting of a Laser Warning Segment (LWS) and Effector Control Segment (OSCS).

The solution provides combat personnel with vital situational awareness on laser threats and countermeasure availability and areas of coverage/protection offered under dynamic conditions, allowing manual or fully automatic responses against threats. The response options range from warning and/or obscuration only up to advanced soft kill, including 3rd Party Effectors and platform weapons.

Laser Warning Segment

The LWS is an integrated, modular, entry level active defence system consisting of Laser Warning Sensors (LWS's), an Active Defence Controller (ADC), a Human Machine Interface (HMI) (Optional), Brackets and interconnecting power and signal harness.

The Control offers:

- Option to integrate to the host platforms Battle Management System (BMS).
- Option to integrate to an external on-board smoke control unit (SAAB or 3rd party) to fire the on-board smoke grenades, manually or fully automatically.
- Option to integrate to and cue other effectors like a Remote Weapon Station (RWS) or Blinding lasers in the direction of a threat after detection.

Features

The features of LWS include the following:

- Also viable as Low-Cost Basic laser warning variant (LEDS-10).
- Hemispherical coverage.
- Detects and Manages all known lasers associated with anti-armour threats (Up to 8 threats simultaneously).
- Full range threat management option (classification and identification and library linked prioritisation).
- Threat position data in Azimuth and Elevation.
- Low false alarm rate, <1 in 24 hours (Under operational conditions).
- Stand-alone or integrated mode of operation.
- Redundancy due to multiple sensors.
- Unique anti-reflection capability.
- Audio threat alerts on intercom.
- User definable threat library tools.
- Built in Test capability.
- Laser training system compatible.

Interfaces

The LWS offers the following interfaces:

- CAN Bus, Ethernet, RS422, USB channel, discrete lines.
- Audio with Audio Press-to-Talk channel.
- Countermeasure dispensing control and fire authorisation channels.
- On-board emitter blanking.

Specifications

The LWS Specifications are:

- Wavelength Coverage: 0.5 to 1.7µm.
- Threat Coverage: Laser Range Finders, Laser Target Designators, Laser Beam riders, Laser Dazzlers and Modulated Illuminators.
- AOA Azimuth LBR: 22.5° RMS (Typical 11°- 15°)
- AOA Azimuth Other: 7.5° RMS (Typical 2°- 5°)
- Single pulse probability of intercept > 99%
- AOA Elevation: 0°, 45° or Top Attack

Applications

The LWS can be used on different platforms including:

- MRAP and Combat Vehicles.
- Amphibious landing craft.
- Fast patrol craft – SF Operations.

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Effector Control Segment (OSCS)

The OSCS is an integrated, modular, entry level active defence system consisting of Local Countermeasure Dispensing Controllers (L-CDC's), an Effector Control and Display Unit (ECDU), Brackets and interconnecting power and signal harness.

The Control offers:

- The option to integrate to the host platforms Battle Management System (BMS), Turret Position Indicator (TPI), Global Position System (GPS), Meteorological (MET) Sensor and Remote Weapon Station (RWS).
- The option to integrate to an external sensor suite (e.g. laser warning, radar, acoustic) that provides threat direction inputs.
- Integration to on board smoke tubes that are installed on a platform, turret, RWS, or any combination thereof.

Features

The features of OSCS include the following:

- Hemispherical coverage.
- Independent of Smoke supplier and calibre.
- Smoke tube Inventory Management.
- Automatic or Manual firing in selected Protected Zones.
- Optimal Automatic dispensing of 120° around threat bearing.
- Misfire Management.
- Area of responsibility Management.
- Hatch Open Management.
- Built in Test capability.
- Communication channel configurability to suite platform integration.
- Integration to any sensor suite.
- Complex ballistic control capable (availability of Wind speed, Turret and RWS rotation required)

Interfaces

The OSCS offers the following interfaces:

- Controls up to 48 entities (tubes or other effectors).
- CAN Bus, Ethernet, RS422, USB channels.
- External Fire Authorisation input.

Specifications

The OSCS Specifications are:

- Number of tubes: <48
- Coverage: 360° depending on installation
- Response Time: < 100 ms
- Screening Time: Ammunition dependant

Applications

The OSCS can be used on different platforms including:

- MRAP and Combat Vehicles
- Amphibious landing craft
- Fast patrol craft – SF Operations