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.

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.
- 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.
LEDS-50 MK2
THE INTELLIGENT
SOFT KILL SOLUTION

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

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