

LWS

Laser Warning System



Elbit Systems of America laser systems utilize both coherent and non-coherent laser sources. We understand the full scope of issues associated with each laser threat type and have the systems engineering expertise necessary to accurately and reliably detect, locate and categorize these threats.

Features

- Complete threat coverage
- High dynamic range
- Direction indication for all threats
- Audio and visual warning
- High probability of detection
- Low false alarm rate
- Immune to:
 - Reflections from nearby objects
 - Gun fire
 - Lightning
 - Fire

Feature	ELAWSII	MTDS
Angular azimuth coverage	Continuous 360° azimuth coverage with four quansors	Continuous 360° azimuth coverage
Angular elevation coverage	-20° to +90° in elevation	-15° to +85° in elevation
Angle of arrival	±1 degree for azimuth ±2.5 degree for elevation (2σ - distribution)	±3 degree for azimuth 3 Regions for elevation (2σ - distribution)
Threats types	Laser range finders (LRF) – single pulse Laser designators (LD) from 2 to 50 Hz. BR- freq 2-70 KHz. IR illuminators (The IR illuminator detector is operational at ambient light levels below one mlux)	
Spectral response	LRF/LD: 0.6μm to 1.6 μm BR: 0.9μm to 1.1 μm IR illuminators: 0. 95 μm to 1.1 μm	
FAR	Less then one false alarm in 18 hours	
Sensitivity dynamic range for detection	High power “range finder” (BR) type threats: Detection: 100 μWatt/cm ² Angle of arrival: 0.5 mWatt/cm ² Low Power “beam rider” type threats: Detection: 0.3 to 1 μWatt/cm ² Angle of arrival: 5 μWatt/cm ²	
POD	99.9%	
Response time	Threat detection: 100 msec Angle of arrival: 80 msec Threat classification: 300 msec	
Pulse width detection	LRF/LD: more than 5 ns BR: more than 100 ns	

