

Micro SPEAR™

Compact Electronic Attack, Self-Protection and Support System for Small Platforms



Overview

Today's battlefields present an array of increasingly sophisticated challenges that require cutting-edge, wide-spectrum solutions. The growing demand for enhanced survivability and unimpeded operation and collection of accurate intelligence in highly hostile environments has resulted in Elbit Systems EW and SIGINT-Elisra (Elisra)'s development of the SPEAR™ family, based on a unified set of today's most advanced systems.

Micro SPEAR - the latest addition to the SPEAR family - is an extremely compact Electronic Warfare (EW) system for Electronic Attack (EA), Self-Protection (SP) and Electronic Support (ES). Due to its minimal size, weight and power requirements, the system is ideal for small and micro platforms, without decreasing mission capabilities or flight duration - for small airborne, ground and maritime platforms.

Main Capabilities

- ECM – Electronic Countermeasures
- RWR – Digital Radar Warning Receiver
- ESM – Electronic Support Measures

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Micro SPEAR is a compact, modular, passive and active EW solution designed for small airborne, ground and maritime manned/unmanned platforms.

Based on wideband digital receivers and DRFM (Digital Radio Frequency Memory) channels, the customizable system operates in a defined frequency range, which can be expanded according to the needs of the mission and the platform.

Software-free and operating independently, Micro SPEAR is built with firmware programmed by the user prior to missions. The interfaces enable operator commands and intervention.

The received information can be sent to the platform's computer or system operator for processing, analysis and building a complete picture. Active capabilities include transmitting techniques to deceive enemy radars for SP or EA.

Small and lightweight, the modular architecture and variety of interfaces enable easy integration on even the most challenging platforms.

Key Strengths

- Cutting-edge digital and RF technologies
- Reduced Size, Weight and Power (SWaP)
- Works independently of other onboard systems
- Software-free, based on firmware only
- User Data File (UDF) for mission programming
- Immediate reaction upon signal reception
- Cost-effective, based on COTS components
- Modular architecture and multiple interfaces
- Advanced support tools

Main Components

- DRE – Digital Receiver & Exciter
- TR – Transmit/Receive module
- PS – Power Supply module

Technical Specifications

- Frequency bands: 2-10 GHz (Expandable to 18 GHz)
- High POI (Probability Of Intercept)
- Advanced jamming techniques
- Input power supply 20-50Vdc
- Fast memory erase
- Interfaces: RS232, RS422, USB, LAN, Discrete I/Os



Component	Power Supply	DRE	TR
Weight (gr)	500	550	450
Size (mm) L/W/H	160/100/20	170/100/25	120/105/23
Power Consumption (W)	10	30	35



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