

About Elbit Systems Ltd.

Elbit Systems Ltd. is an international high technology company engaged in a wide range of defense, homeland security and commercial programs throughout the world. The company, which includes Elbit Systems and its subsidiaries, operates in the areas of aerospace, land and naval systems, command, control, communications, computers, intelligence surveillance and reconnaissance ("C⁴ISR"), unmanned aircraft systems, advanced electro-optics, electro-optic space systems, EW suites, signal intelligence systems, data links and communications systems, radios, cyber-based systems and munitions. The Company also focuses on the upgrading of existing platforms, developing new technologies for defense, homeland security and commercial applications and providing a range of support services, including training and simulation systems.

Advanced New Space Solutions

Essential Knowledge, Predictive Insights



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Elbit Systems Ltd.
Advanced Technology Center, P.O.B. 539, Haifa 3100401, Israel
E-mail: aerospace@elbitsystems.com www.elbitsystems.com

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Autonomous Satellites Constellations

Elbit Systems' autonomous satellites constellations, empowered by three decades of experience as a space technology leader, leveraging emerging New Space technologies & platforms and Elbit's novel payloads, enables exciting new missions and operational capabilities.

Empowered by Elbit Systems' novel autonomous capabilities, payloads and real-time mission computers, our New Space constellations are designed to provide optimized, on-demand immediate tasking, continuous monitoring and ultra-high revisit time insights, tailored to meet our customers' real-time and predictive needs.

Elbit System' satellite constellations leverage innovative sensors as well as intra-satellite and inter-satellite communication links.

Equipped with an advanced TIR E/O payload, the constellations will collect vital information enabling a wide range of exciting applications, from global warming/climate monitoring and power gridlines analysis to space debris monitoring and situational awareness services.

Core Capabilities

- End to End space mission design and execution, platform and payload design
- Constellation optimization and management
- Orbital mechanics simulations and design
- Optimization of satellite utilization, coverage area and re-visit time
- Communication: budgets, band allocation, licensing
- Launch and constellation orchestrating, including last-mile positioning

Core Technologies

- Mission planning, system engineering and payload integration to optimized platform
- Advanced, ingenious payloads
- Real-time mission management, powerful onboard processing
- Inter satellite link, in-plane and cross-planes
- Autonomous constellation capabilities



Missions

Our constellations are designed with open architecture to support multiple missions, such as:

- Space debris monitoring and situational awareness
- Advanced remote sensing, multi-spectral E/O and SAR
- Advanced signal processing
- Wide band LEO communication
- Scientific research

Ground Station

Our cutting edge ground stations Includes all software, hardware and infrastructure required to support the constellations, including mission planning and optimization, house-keeping, constellation monitoring and advanced mission analysis tools

Through Space. Anytime. Anywhere.



Environmental and agricultural remote sensing

Emergency, search & rescue

Space debris monitoring