

Heron UAS: A Reliable Maritime Patrol Solution

The Heron UAS stands out as a premier solution for maritime surveillance, delivering unmatched capabilities for monitoring vast oceanic and coastal areas. With growing global maritime security challenges, such as illegal activities, border control issues, and natural disasters, having a reliable and advanced tool like the Heron UAS can be a game-changer for national defense and border protection agencies. Here's an overview of the critical features and advantages of the Heron UAS:

1. Advanced Multi-Sensor Payload

The Heron UAS is equipped with an extensive range of sensors, making it versatile for a variety of maritime operational needs. This includes:

- **Radar Systems:** To detect and track vessels, especially in difficult weather conditions or low visibility.
- **SIGINT Sensors:** For signals intelligence, enhancing situational awareness and interception of potential threats.
- **EO/IR Cameras:** Electro-optical and infrared cameras to provide detailed imaging during both day and night, essential for real-time surveillance and threat identification.
- **Satellite Communications (SATCOM):** Enables continuous beyond-line-of-sight (BLOS) connectivity, ensuring seamless data transmission to command centers.

The integration of Automated Identification System (AIS) enhances the capability to track vessels, while the CRISP Real-Time Exploitation System provides actionable insights, mission planning, and secure data management.

2. Operational Flexibility and Performance

- The Heron UAS has a long endurance of over 24 hours, ensuring that large maritime areas can be covered without interruption. The high-altitude, long-range cruising capability boosts survivability, minimizing detection risk.
- The system also includes jamming capabilities, further enhancing security in contested areas where communication interference is a concern.
- Whether used for military operations or border security, the UAS ensures rapid deployment and high operational availability, even under adverse conditions, from harsh weather to complex operational environments.

3. Proven Track Record

The Heron UAS has been operational for over 20 years across various regions including South America, Asia, and Europe, gaining a reputation for reliability in maritime operations. It has been effectively used to:

- Deter illegal activities such as smuggling and unregulated fishing.
- Enhance border security by monitoring maritime boundaries.
- Respond quickly to maritime emergencies, such as search and rescue operations.



4. Comprehensive Service Offering

Israel Aerospace Industries (IAI) provides an all-encompassing service package, ensuring that the UAS operates smoothly and effectively. This includes:

- Experienced operational teams: Responsible for UAS operation, maintenance, and communication support.
- Operational Flexibility: A leasing model is available, particularly beneficial for organizations such as FRONTEX, the EU's border security agency, which uses the Heron UAS for surveillance over strategic locations like Crete and Malta.

The partnership with Airbus DS Airborne Solutions and ADAS exemplifies IAI's commitment to providing operational and financial flexibility, offering a leasing model that can support long-term operational goals while managing financial investment.

5. Global Reach and Market Leadership

With its proven reliability and operational flexibility, the Heron UAS has positioned itself as a market leader in maritime surveillance. IAI's experience, combined with the Heron's robust performance, makes it an ideal tool for both military and civil maritime security operations. As maritime threats evolve, having access to such a system ensures a nation's sovereignty is safeguarded.

The Heron UAS is an essential asset for nations facing complex maritime security challenges. Its advanced sensor suite, operational flexibility, and comprehensive service offering make it a crucial component in maritime defense. Whether for border control, anti-smuggling operations, disaster response, or military reconnaissance, the Heron UAS proves itself as a reliable, efficient, and technologically advanced solution for maritime patrols. As global maritime security needs continue to grow, the Heron UAS ensures a future-proof response to evolving threats.

The Future of Air Defense

ELTA's Cutting-Edge Multi-Sensor Radar Solutions

In an era of rapidly evolving threats, where drones, cruise missiles, and ballistic salvos redefine the battlefield, ELTA Systems, a division of Israel Aerospace Industries (IAI), stands at the forefront with its revolutionary radar technology. At the heart of this technological leap lies the ELM-2084 Multi-Mission Radar (MMR) and its latest evolution, the Multi-Sensor MMR (MS-MMR).

Transforming Modern Defense with Multi-Sensor Synergy

The MS-MMR represents a game-changing advance in radar technology. By combining multiple sensors into one cohesive system, it provides unparalleled precision and comprehensive coverage against a spectrum of threats. "We are witnessing increasingly complex scenarios," explains Eyal Shapira, General Manager of Air Defense and Naval Radar Systems at ELTA. "From low-signature drones flying mere meters above ground to long-range ballistic missiles, today's radars must detect, track, and classify targets with unmatched speed and accuracy." This new system fuses data from various sources, including radar, electro-optical sensors, and Signal Intelligence (SIGINT), to deliver a unified and highly detailed situational picture. By seamlessly integrating with advanced weapon systems, the MS-MMR ensures precise and timely interception decisions, embodying the principle that as Mr. Shapira notes: "for multi-challenges, you need a multi-solution".

A Proven Legacy of Excellence

IAI ELTA's radar systems are no strangers to high-stakes performance. The MMR family has been a cornerstone of Israel's multi-layered air defense, powering systems such as the Iron Dome, David's Sling. The MMR's global footprint spans numerous, reinforcing its reputation as a trusted solution in real-world combat scenarios.



© IAI- Multi Mission Radar ELM-2084 MMR enhancing situational awareness

"Our radars are the eye and brain behind every interception," notes Shapira. "Whether it's the Green Pine in the Arrow system or the MF-STAR on naval platforms, these technologies provide the precision and reliability our customers depend on in critical moments."

The MS-MMR's introduction addresses the increasingly sophisticated challenges posed by adversaries. Modern threats like supersonic cruise missiles and swarm attacks by drones demand a new level of agility and intelligence in air defense systems. MS-MMR's real-time capabilities enable it to adapt to these evolving challenges. As Shapira puts it, "We are not just building radars; we are building solutions that think, evolve, and keep us a step ahead." The system's ability to classify threats accurately and optimize resource allocation across a network of radars creates what Shapira describes as a "radar beehive." This interconnected network ensures seamless operation, even in the event of individual unit failure. From military installations to civilian infrastructure, IAI's radar systems protect critical assets worldwide. With customers ranging from NATO allies to Asian navies, the MS-MMR is set to redefine air defense capabilities globally. As Shapira reflects on the challenges faced, he highlights the importance of adaptability: "The world's battlefields are changing daily, and so must our systems."