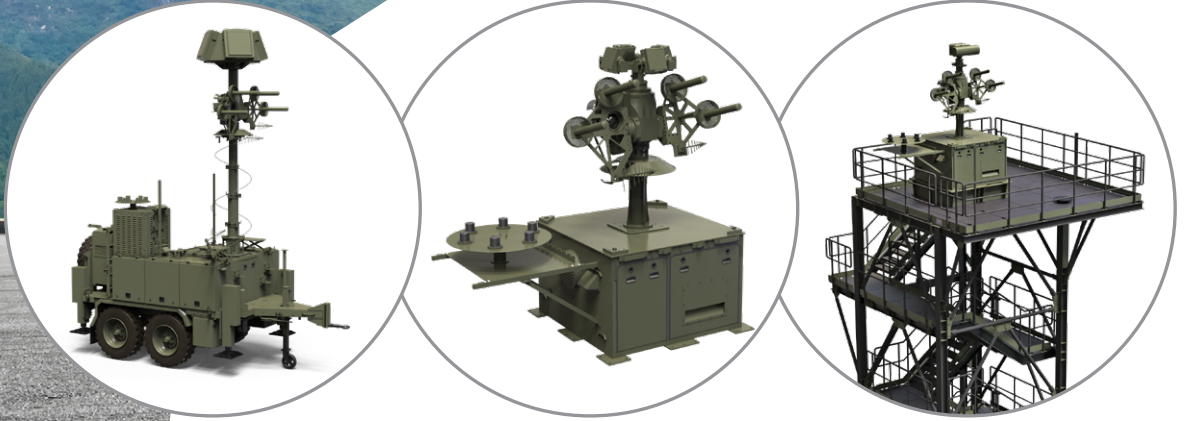




COUNTER-UAV SYSTEM

#C4I



iHTAR is an AI-powered countermeasures system developed by ASELSAN to neutralize mini/micro UAV threats in urban and rural environments. Combining AESA radar technology, advanced image processing algorithms, and programmable FPV jamming capabilities in a single architecture, the system detects and accurately identifies threats early and neutralizes them. With its compact design that can be integrated into any vehicle/platform or used in a fixed position, iHTAR is designed for use in protecting critical military and civilian installations, including nuclear power plants, oil refineries, ensuring border security, and protecting large organizations against UAV threats.



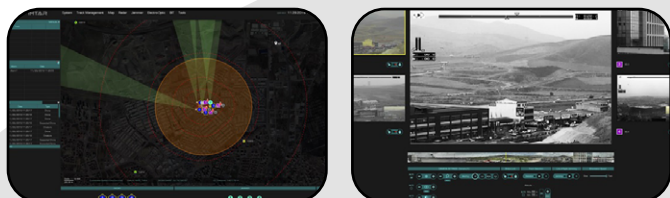
aselsan

General Specifications

- High-accuracy detection, tracking, and classification of multiple UAVs with a surveillance radar equipped with AESA (active electronically scanned array) technology
- High-accuracy UAV detection and tracking with advanced image processing technology
- AI-powered decision-making algorithms
- Recognizing the threats from a distance using TV/Thermal cameras
- Enhanced accuracy with sensor fusion
- Target emission detection with RF Detection Subsystem
- Data and log recording capability
- Requires minimum operator intervention
- Built-in-Test (BIT) capabilities
- Operating in all-weather conditions for 7/24
- Customizable with its open and modular architecture
- Compatible with military standards
- Ability to integrate with hardkill solutions such as Korkut 25, ŞAHİN Lite/Dual 40 mm and MİĞFER Self-Defense Weapon Systems, and directed energy solutions such as EJDERHA HPEM and GÖKBERK Laser Weapon System as countermeasures
- Ability to work integrated with different types of sensors (Acoustic Detection Subsystem, portable direction finding (DF) Subsystem, etc.) through open and modular architecture feature
- Compatible with web based software
- Dynamic spoofing
- Compatible with all vehicle/platform and stationary design solutions

Command and Control System

- AI-based image processing capabilities and an advanced decision support system
- Minimal human intervention with AI-supported autonomous detection and tracking mode
- Multi-sensor fusion and auto-tracking
- Classification of fused sensor data by using AI algorithms
- User-friendly, map-based interface
- Centralized Command and Control capabilities with integrated GIS, alarm zones, filtering
- Easy integration with different sensors and effectors thanks to modular, open architecture infrastructure
- Scalable software architecture suitable for fixed and mobile deployments
- Target prioritization and engagement capability with Threat Evaluation and Effector Allocation
- AI-based target destruction status assessment capability
- Fully autonomous detection, tracking, and functional destruction cycle



Radar System

- Radar options as S-Band (2-4 GHz) and X-Band (8-12 GHz) operating frequencies with AESA antenna structure
- High tracking update frequency automatically adapted to the target
- Automatic tracking and automatic classification during search (TWS/TWC)
- Ability to generate 3D (range, lateral and elevation) target position information
- MIL-STD-810G and MIL-STD-461F compliance

X-Band Radar

- Azimuth: > 100°
- Elevation Coverage: > 70°
- Instrumented Range: 15 km
- Light Weight Design: < 15kg

S-Band Radar

- Azimuth (*): > 90°
- Elevation Coverage: > 90°
- Instrumented Range: 25 km
- Update Rate: > 1 Hz

*The technical specifications are given for a single-panel system, providing 360° lateral coverage with 4 radars.

RF Countermeasure System

- Jamming of Drone-Mini/Micro Remote Command Frequencies, FPV Remote Command Frequencies, FPV Image Transmission Frequencies, and GNSS Frequencies
- Jamming 400-6000 MHz frequency coverage and expandable up to 6000-8000 MHz bands
- "Active" jamming and "Reactive" jamming by RF Detection Subsystem
- A "Software-Based Jamming System" programmable for specific targets
- Protection against swarm threats with a omni directional antenna set
- Target-focused, high-impact jamming with directional antenna option

Electro-Optic Systems

- Long distance surveillance and reconnaissance, under all weather conditions day and night thanks to the third generation thermal imaging system and a family of high-definition daytime cameras.
- Stabilized low-latency image transmission.
- Automatic target detection, tracking, and identification capability.
- Compatibility with advanced image processing technology

