

KAPAN Counter Drone System



Complete Security System Against Drone Threats

KAPAN Counter Drone System offers superior drone detection, classification and tracking performance with Retinar FAR-AD Drone Detection Radar and Thermal / Daylight Cameras. System also allows neutralizing the drones with integrated RF Jammer.

Integrated Solution for Perimeter Security

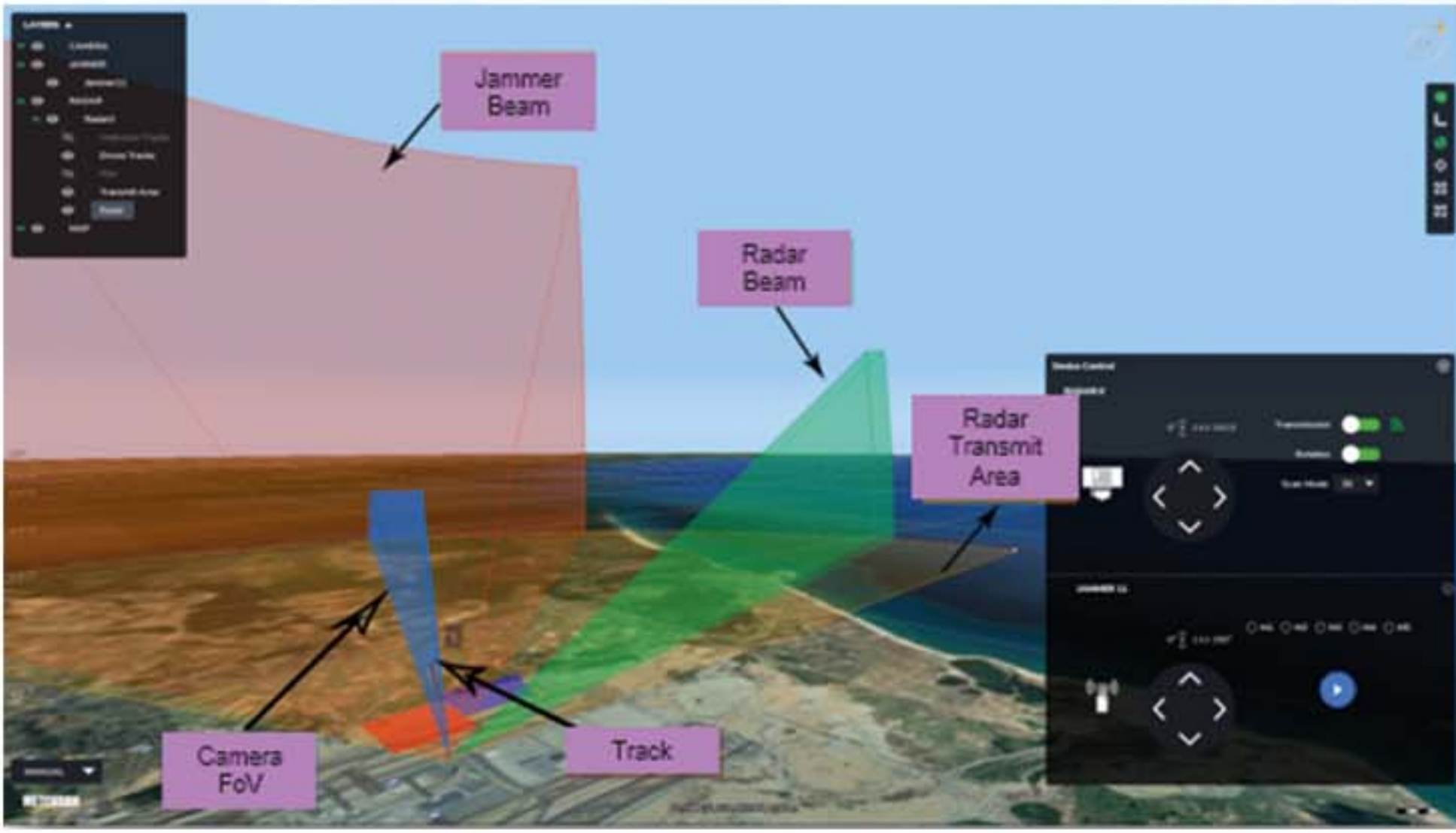
Detection and classification of drone is done by Retinar FAR-AD Drone Detection Radar in KAPAN Counter Drone System. Radar measures target 3D position (range, bearing and height) and classifies the target as drone automatically with high accuracy. Electro-Optic System and RF Jammer are directed to target position. With Artificial Intelligence (AI) software, Electro-Optic System also classifies the target automatically. System can initiate the Jammer automatically or ask an approval from the operator to neutralize the target.

More than one KAPAN Counter Drone System can be used depending on the characteristics of the area to be protected. In this case, by the KAPAN Command and Control Software (C2), the targets can be fused and viewed as a single track on a common operation picture. C2 assigns most appropriate KAPAN subsystem according to position of target drone.

KAPAN sensors and countermeasure components can be mounted on a vehicle, mast or tower. It is also possible to deploy each subsystem in different amounts according to the requirements of the area. In this way, effective solutions can be achieved both in terms of performance and cost.

RF DF System and hard kill systems (Laser System, Hunter Drone) are optional and they can be integrated to KAPAN Counter Drone System.





Single System for All Mini/Micro UAV Threats

KAPAN Counter Drone System, which is developed by Meteksan Defence, offers integrated system solution. KAPAN demonstrates superior performance in terms of detection, classification, tracking, and neutralizing of mini/micro UAVs.

KAPAN is used for:

Security of Critical Facilities (Airports, Power Plants, Refineries, Harbors), Border Surveillance & Border Security, Base and Force Protection

Key Features



Detection of Mini/Micro Drones up to 5 km



Scalable Infrastructure



360° Scanning or Sector Scanning



Compatible with Military Standards (MIL-STD-810, MIL-STD-461)



Multi Layered Target Classification and Identification in Low Visibility at Far Distances



7/24 Operation in All Weather Conditions



Early Warning from Distant Ranges Against Threats with Alarm Zone Management



Effective Defense Against Swarm UAV Attacks

Drone Detection Radar

Ku Band
3D Position Data (Range, Bearing, Height)
2°x40° Beam Width
4/8/16/30 rpm Scan Rates, 360° Continuous Scan
Monopulse System Architecture
Track Analysis Mode (High Accuracy Micro-Doppler Analysis)
Frequency Hopping, Pulse Compression, Doppler Signal Processing
Low RF Output (LPI)

Electro-Optics

High Resolution and Long Range Cameras
Cooled MWIR Thermal Camera (640x512)
Full HD Daylight Camera (1920x1080)
Automatic Drone Classification and Tracking
Configurable upon Customer Requirements

RF Jammer

Telemetry Communication & Control Bands
Video Transmitting Bands
WiFi / ISM Bands
GNSS - Global Navigation Satellite System Bands: GPS, GLONASS, GALILEO, BEIDOU
Directional / Omnidirectional Antennas
Configurable and Programmable upon Customer Requirements

Command and Control Software (C2)

Deep Learning and Artificial Intelligence based Multi Layered Target Classification
Multiple System Control via single GUI
Open/Modular Architecture, Integration capability with existing security systems
Sensor Fusion
3D Mapping and Symbols
Visual and Aural Alarms
Record and Playback
Automatic Built-In Test
Remote Connection (via web browser)

