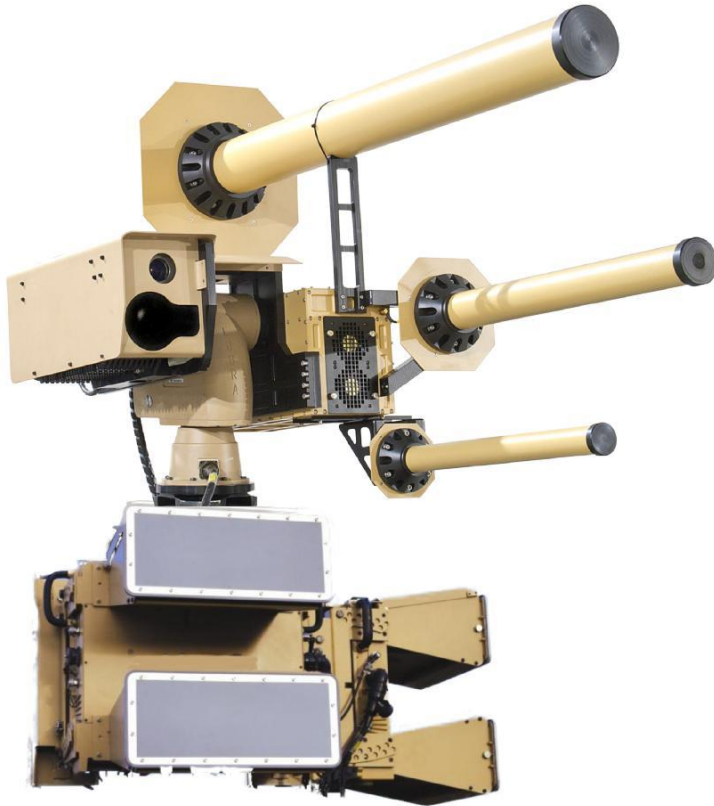




Vision4ce
Software inside

Delivering World-class Surveillance and Inhibition Capability



DETECT



TRACK



DISRUPT



AUDS Anti UAV Defense System

UAV Detection, Tracking & Disruption System

AUDS is designed to disrupt and neutralize Unmanned Aerial Vehicles (UAVs) engaged in Hostile Airborne Surveillance and potentially Malicious Activity. The AUDS system combines electronic scanning radar target detection & classification, Electro Optic (EO) tracking and directional RF inhibition capability over three independent RF bands (GPS L1, 915MHz ISM and 2.4GHz ISM).

The Anti-UAV Defense System, AUDS, is a smart-sensor and effector package capable of remotely detecting small Unmanned Air Vehicles (UAVs) then tracking and classifying them before providing the option to disrupt their activity. The system may be used in remote or urban areas to prevent UAVs being used for terrorist attacks, espionage or other malicious activities against sites with critical infrastructure.

The Advanced Technology Group, ATG, brings together three leading British companies each with the unique capabilities required to create AUDS. The Blighter Surveillance Systems

Blighter A400 series Air Security radar is able to DETECT small UAVs in all weather conditions 24 hours a day. The Chess Dynamics EO/IR camera system, with state-of-the-art video tracking technology, is able to TRACK the UAV and, combined with radar target information, classify the target. The operator is then able to make a timely and informed decision to use the Enterprise Control Systems Ltd, ECS, smart RF inhibitor to selectively interfere with the C2 channels on the UAV allowing the system to DISRUPT the UAV's mission.

AUDS Anti UAV Defense System

specification

Components:

- Blighter Radar system
- Integrated Software Platform
- Chess Dynamics Hawkeye camera system
- ECS Directional RF Inhibitor system
- Integrated High Gain Antennas
- Vision4ce DART detection and tracking



Support:

ECS is able to provide in-country commissioning and training.

Export License:

Purchase of this equipment is subject to export license approval.

Patent Pending

Data contained on this sheet is subject to change and should be used for guidance only

AUDS specification

Blighter Radar System

Detection Range: 8 km
Minimum Target Size: RCS = 0.01 m²
Frequency Band: Ku-band
Radar Type: E-scan Frequency Modulated Continuous Wave (FMCW) Doppler Surveillance Radar
Power Output: 1 watt (standard), 4 watt (high power)
Elevation Coverage: +/-40° using optional Blighter Radar Tilting System

Chess Dynamics Hawkeye Camera System

Color Camera: Color HD 2.3 Megapixel Array
Optical Zoom x30, Digital Zoom x12, Auto Focus
Thermal Camera: Gen3 Cooled 640x512 pixel 3-5um (MWIR)
Continuous zoom 24° to 1.8°
Digital Video Tracker: Multi Object Detection, Centroid & Edge Measurement
Moving Object Detection, Robust Clutter Rejection
Correlation Algorithm
Pan & Tilt: Azimuth Continuous,
Elevation -20° to +60°, Max Speed 30° per second
Gyro Stabilized Option

ECS Directional RF Inhibitor

Frequency Coverage: GPS L1: 1575.42 MHz (Software Defined)
915 MHz ISM: 902 MHz to 928 MHz (Software Defined)
2.4 GHz ISM: 2.4 GHz to 2.49 GHz (Software Defined)
RF Output Power: GPS L1: 1 watt nom. 10 watt max into antenna
915 MHz ISM: 40 watt nom into antenna
2.4 GHz ISM: 40 to 50 watt nom into antenna
Antennas: Three integrated 15 dBc circularly polarized high gain antennas

System Environmental Specification

Operational Temperature: -32°C (C1) to +49°C (A1) MIL-STD-810G
Storage Temperature: -33°C (C1) to +71°C (A1) MIL-STD-810G

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