Next-Generation Security
Advanced Monitoring and Autonomous Response Solution

AVERT MPO Mission Planning and Operations + MatrixSpace Radar AI Sensors

Critical infrastructure and assets, whether permanent or rapidly placed, face growing threats from non-traditional vectors. Securing spaces from small uncrewed aircraft systems, improvised materiel and well-coordinated actors operating in adverse visual and physical conditions challenges traditional security monitoring and response approaches.

Advanced technology, featuring the use of intelligent edge sensors and autonomous systems, promises to change the security dynamic. MatrixSpace and ARES Security provide a unique solution for remote one-to-many coordination of robotic assets, powered by real-time situational awareness, that increases efficiency, reduces risk and improves response.

TRUE ALARMS

MatrixSpace AI changes the game for security operations with intelligent classification of objects. Whether in air, or on ground, security operators and autonomous systems no longer need be distracted by false detections generated from background clutter. MatrixSpace radar sensors generate truly actionable cues.

LAYERED SENSOR FUSION

ARES Security AVERT MPO seamlessly correlates detections, tracks and signals from multiple sensors into a common operating picture. By fusing and synthesizing camera, radar, thermal, human and other inputs, AVERT MPO empowers security operators with superior situational awareness.
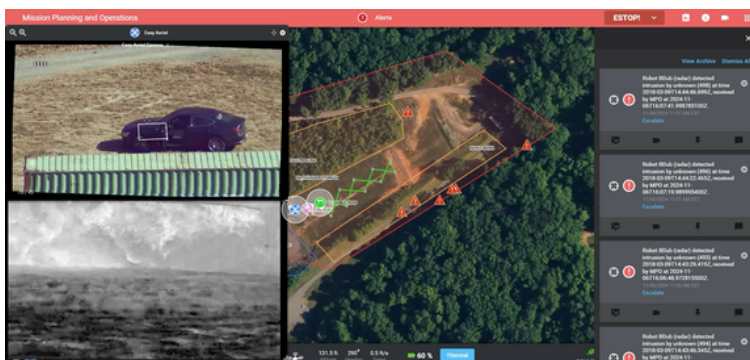
COORDINATED CONTROL & RESPONSE

With actionable data from the MatrixSpace AI platform, AVERT MPO controls and coordinates combinations of autonomous systems that overwhelm adversaries in both scale and speed of response. Guided by artificial intelligence and clear human governance, responses are powerfully dynamic.

MatrixSpace Radar Expeditionary Kit

ARES Security AVERT MPO

KEY FEATURES

- Intelligent, multi-domain radar monitoring, including drone detection and ground activity
- Fused MatrixSpace Radar, camera and thermal sensor feeds from fixed, semi-fixed and mobile robotic vehicles
- A single AVERT MPO system can coordinate command and control for teams of autonomous systems, sensors and human responders in the field
- Unique digital twin planning environment generates mission/threat scenarios, informs robotic sentries and predicts success probabilities
- Dynamic pathing adapts autonomous systems to changes as they happen, whether in the field, or from the C2 center
- DoD accredited system

MatrixSpace Radar
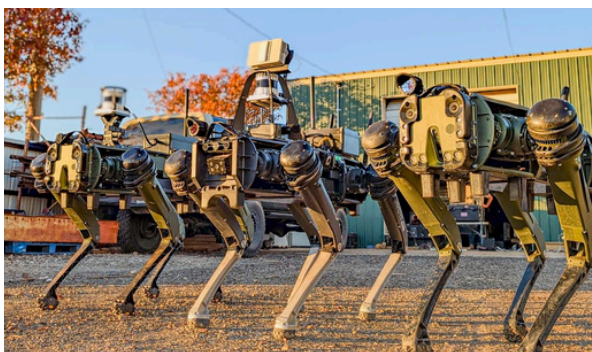
Detect More, Decide Faster

MatrixSpace radar systems accurately and reliably detect small drones up to 1.2km away and track dozens simultaneously. Each radar is about the same size as a smartphone, lightweight and draws minimal power — effectively enabling placement on robodog sentries, or semi-permanent fixtures.

Real-time Intelligence

MatrixSpace features advanced, real-time artificial intelligence object classification and de-cluttering software embedded at the edge. The system differentiates between people, vehicles, aircraft and drones. With the benefit of AI, detections are clear and actionable so operators and machines can act confidently and decisively.

Autonomy Enabled

Full integration with AVERT MPO powers fused situational awareness from other sensors, while also empowering autonomous vehicles with radar tracks for guidance and slew to cue targeting.

ARES Security AVERT MPO

True Automation for Robotic Assets

AVERT MPO integrates robodogs (Q-UGV), UAS, and autonomous systems to provide a meet a range of applications and mission objectives.

Common Operational View

AVERT MPO combines a mission planning and operations tool with an advanced Command and Control platform to manage and respond to all threats. The system can be utilized for both security and routine operations to optimize monitoring, safety, security and response capabilities. User-defined mission plans, rules, and standard operating procedures can all be incorporated to automatically alert to designated activity, consolidate and disseminate relevant information, and create a collaborative response to any incidents.

Digital Twin Asset Knowledge

The AVERT Digital Twin optimizes operational planning & enables robotic autonomy.

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