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## LAMS-CUAS AIRSPACE SURVEILLANCE SECURITY IN ANY ENVIRONMENT

## **APPLICATIONS FOR THIS PRODUCT INCLUDE:**

- Border Security
- Critical Infrastructure Monitoring
- Temporary and Permanent VIP Security

ANPC's LAMS Counter Unmanned Air System is a multi-sensor surveillance system designed for early detection and identification of all cooperative and uncooperative aircraft to provide security for airports, borders, and high-value assets such as oil drilling and refining facilities. Drones used with malicious intent pose a current and growing threat to lives and property including industrial, commercial, and political infrastructure, and the LAMS-cUAS was designed specifically to mitigate threats from drones and other hostile airborne targets. The LAMS-cUAS utilizes and seamlessly integrates three critical technologies: primary surveillance radar, secondary surveillance radar, and electro-optical imaging.

The LAMS-cUAS is a full-featured ASR with a compact, sheltermounted primary radar and a solid-state SSR with a range to 100NM and greater accuracy than conventional radar systems. The lightweight, low-power camera system provides exceptional day/night visual identification of any target the operator suspects is a potential threat. The live data feeds can be easily shared with intercept forces for mitigation and countermeasures.



## **FEATURES AND REQUIREMENTS**

- 360° detection and visual identification of UAS or any target with a radar cross section of 1 m2 to 20NM and 80% detection probability
- Primary radar detection of >100 targets per scan to 99NM
- S-band primary radar operation ensures optimal performance in all weather conditions
- Secondary detection of up to 150 larger targets to 100NM
- 2Hz surveillance update rate provides higher accuracy than other SSR systems
- Primary and secondary radar data integrated into one operator console
- Low transmit power and prime power requirements

CAMERA SPECIFICATIONS		
EO Imager		
Wavelength	0.4 – 0.9 um	
Field of View	1.2° - 48°	
Zoom	39X	
Pixels	960 x 720	
MWIR Imager		
Wavelength	3.3 – 5.3 um	
Field of View	1.6° – 22° (SD)	
Zoom	13X	
Pixels	640 x 480	
SWIR Imager		
Wavelength	0.8 – 1.8 um	
Field of View	0.18° - 0.55° (SD)	
Zoom	3X	
Pixels	640 x 480 (SD), 960 x 720 (HD)	

- Self-contained in a single 20' Conex container for transport, deployment, and operations
- Mid-wave infrared (MWIR), electro-optical (EO), short-wave infrared (SWIR) imaging
- Embedded video processing, incluidng image stabilization and target tracking
- U.S. owned and manufactured
- Mature to TRL9
- High sensitivity to detect small targets (< 1 square meter)</li>
- Integrated with AMOC, STARS and other leading C2 systems

RADAR CHARACTERISTICS	
Transmitter Type	Solid state, high stability, high reliability, higher transmit power options available increasing target range/PD
Transceiver	Digital-to-RF-to-digital, high stability, high dynamic range
Operational Frequency	S-Band
Tuning Resolution	1MHz arbitrary center frequency within the entire operational frequency range
Waveform Generator	Arbitrary, software-defined
Range Cell Size	< 10 meters
Waveform Type	Capable of unambiguous velocity operation
Unambiguous Radial Doppler Velocity	> +/- Mach 1 (661 knots, 340m/s)

COVERAGE	
Min. Range	< 1NM
Max Instrumented Range	> 100 nmi (target range a function of target size)
Cone of Silence	30° from horizon
Elevation Detectability	Ground level to at least 25,000 feet where not limited by cone of silence
Azimuth Coverage	360°