



GASR-3D 'Terrier'

COUNTER-UAS AIR & GROUND SURVEILLANCE RADAR

The GASR-3D 'Terrier' is the next generation of Counter-Loitering Munition/UAS/Drone solution.

BENEFITS

- ✓ Unique capability: Simultaneous aerial and ground target detection
- ✓ Used in V-SHORAD applications
- ✓ No moving parts, fully solid state
- ✓ Continuous real time detection and tracking, classification
- ✓ Compact and light weight
- ✓ Improved and ergonomic UI

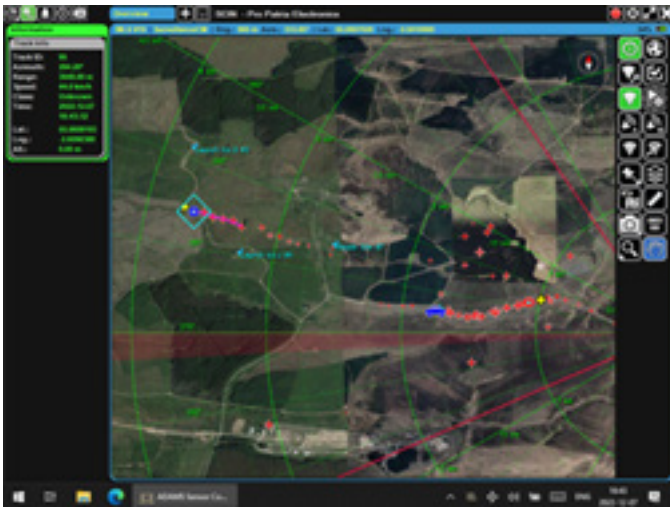
OVERVIEW

The Radar is capable to simultaneously detect, track and classify Loitering Munition, UAS/Drone, Helicopter, Aircraft and ground targets (humans, vehicles, tanks, etc..). In V-SHORAD configuration, the system detects and recognizes aerial threats and provides target information for the fire control system.

The principle of operation is Frequency Modulated Continuous Wave (FMCW) technology with DBF enabling high MTBF. It utilizes unique AESA transmitter. Low power and continuously changing frequency provides Low Probability of detection and Interception (LPI). The Radar utilizes multiple frequency channels in a wide frequency range to overcome the potential environmental disturbances and interferences and to adapt to the operating environment.

Embedded GPS and magnetic compass units are built-in for quick deployment. The Radar can be fixed deployed or portable due to its low weight and provides easy installation in hardly accessible locations. It is certified to withstand and operate in harsh environmental conditions and is suited for off-road vehicle transportation conditions.

The GASR-3D 'Terrier' is designed for easy integration with Command and Control Systems and can be interfaced via 1G Ethernet.



User Interface (ADAMS)



Processing Unit

TECHNICAL PARAMETERS

SURVEILLANCE AND DATA PROCESSING			
Detection Ranges	Loitering	(RCS 0.05 m ²)	3,6 km
	Munition		
	Pedestrian	(RCS 0.5 m ²)	6.8 km
	Soldier	(RCS 1 m ²)	8.5 km
	Vehicle	(RCS 10 m ²)	14.5 km
	Helicopter	(RCS 50 m ²)	22 km
Azimuth Coverage	90° with DBF staring beams (single plate unit)		
Elevation Coverage	80° with AESA Tx		
Instrumented Range	4, 8, 12, 16, 26 km		
Accuracy	Range: 4m Azimuth: 0.4° Elevation: 0.5°		
Minimum Detectable Radial Velocity	1.0 km/h		
Minimum Detectable Range	50 m		
Track Update Rate	0.25 sec		

ACCESSORIES	
Operator unit with 230 VAC	
Power adapter	
Tripod (optional)	
Transportation cases	

TECHNICAL PARAMETERS	
Operation principle	FMCW - Doppler with DBF, AESA, AI
Frequency Band	X Band
Transmitted Power	40 W
Input Voltage	28V DC
Cooling Method	Passive only
Interface	Ethernet
Interface Protocol	ASTERIX, STANAG, Customer-tailored
Operating Temperature	-40°C to +55°C
Export Control Restrictions	no ITAR components
Antenna Unit	
Size	73 x 42 x 25 cm (single plate unit)
Power Requirement	300 W
Weight	23 kg
Processing Unit	
Size	43 x 13 x 38 cm
Power Requirement	200 W
Weight	12 kg

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