



HENSOLDT SPEXER® 360

Surveillance Radar for Security Applications

SPEXER® 360 is a lightweight, low power, X-band radar, designed to be deployed on a variety of platforms. SPEXER® 360 can be easily integrated with additional sensors through a highly flexible C2 system. Designed for both military and civil applications SPEXER® 360 offers a highly capable and affordable surveillance capability.

Main Applications and Capabilities

- Situational awareness for military and CNI
- Drone detection
- Mission adaptable
- Flexible deployment options

Benefits

- Increased probability of small target detection
- low cost of ownership
- Highly reliability
- Effective in poor weather conditions
- 360° Coverage

Features

- Advanced Doppler processing
- X band Solid state transceiver
- Selectable frequencies
- Low power consumption
- Lightweight radar

SPEXER® 360

Features and Benefits		
Resilience	Resistant to Jamming Resistant to Interference	✓ ✓
Clutter Suppression	Doppler Processing RF Frequency Variation Land Clutter Map	✓ ✓
Rapid Deployment	Integrated Transceiver Integrated GPS Fast Radar Power Up Simple Mounting Options	✓ ✓ 25 SEC (5 SEC from Standby) ✓
Ultra-High Reliability Solid State Electronics		✓
Graceful Degradation		✓
Concurrent Long and Short Range Detection		✓
Continuous System Health Monitor and Built-In Self Test		✓
Gigabit Ethernet Radar Output		✓
Detection of low air and surface targets		✓
360 Degree and Sector Scanning		✓

Specification		
Peak Power		Nominally 80 W
Waveforms	Pulsed, Coherent Automatic Power Optimisation	✓ ✓
Signal Processing	Pulse Compression Pulse Doppler Adaptive Clutter Suppression	✓ ✓ ✓
ASTERIX CAT 240 Protocol Radar Video Data Output Over LAN		✓
Dimensions / Space Requirement (Not Including Vibration Kit)		Ø 586 x 292 mm
Antenna		Patch Antenna Array
Power Supply		+19-32V DC 100-250V AC Converter (Option)
Power Consumption		150 watts typical
Weight (Not Including Mounting Kit)		20 kg
Azimuth Beam Width		≤ 4.0° @ -3dB
Elevation Beam Width		Nominally 22° @ -3dB

Performance		
Detection Range	SPEXER® 360	
	Target	Range
	Micro UAV (0.03 m2 RCS)	1.6 km
	Walking Man (0.5 m2 RCS)	4.0 km
	Small Vehicle (5 m2 RCS)	7.1 km
	Truck (10 m2 RCS)	8.4 km
Range Discrimination		28 m
Range Accuracy		5m RMS
Azimuth Accuracy		0.8° RMS
Number of Tracks		Dependent on Display Option
Probability of False Alarm		10 ⁻⁴ Pfa
Moving Target Detection		Up to 128 Filters
Constant False Alarm Rate		Yes
Environmental		IP67
Operating Temperature		-25 °C to +55 °C
Reliability		Up to 50000 HRS MTBF
Frequency Band		9.22 to 9.38 GHz
Frequency Selection		9 User Selectable