



# MULTI-MODE, MULTI-DOMAIN SAR/MTI RADAR

Gather actionable intelligence using a high performance, airborne radar in all weather, day or night, for ground and maritime environments.



WWW.IMSAR.COM



Designed to fly on Group 4-5 uncrewed airborne platforms and crewed aircraft.



### **CAPABILITIES**









**P.** 801.798.8440 **F.** 801.798.2814

# **SYSTEM SPECIFICATIONS**

SIZE (STANDARD STRONGBACK CONFIGURATION)	DIAMETER: 5.4 IN (13.7 CM) LENGTH: 58.1 IN (147.6 CM) HEIGHT: 6.8 IN (17.3 CM)
WEIGHT (STANDARD STRONGBACK CONFIGURATION)	24 LBS (10.9 KG)
POWER	300 W CONFIGURABLE, 28 VDC
FREQUENCY	КИ
TARGET PLATFORMS	GROUP 4-5 UAS, CREWED AIRCRAFT
ENVIRONMENTAL	MIL-STD-810G: OPERATIONAL AND STORAGE TEMPERATURE, RAIN, SALT SPRAY, HUMIDITY, TEMPERATURE SHOCK, OPERATIONAL VIBRATION, SHOCK LOAD
RECOMMENDED MAINTENANCE INTERVAL	~ 2,000 HRS
SENSOR CUEING	CURSOR ON TARGET
COMMUNICATION	ETHERNET
SERVER	AIRBORNE OR GROUND PROCESSING SERVER REQUIRED (SIZE AND WEIGHT NOT INCLUDED IN SPECIFICATIONS ABOVE)
COMMAND & CONTROL	LISA 3D™ AND RADAR CONTROL API
IMAGE EXPLOITATION	LISA 3D <sup>™</sup> OR EXISTING PED EQUIPMENT
STANDARD DATA PRODUCTS	KML, COMPLEX NITF, JPG, PNG, BMP, STANAG 4607, STANAG 4676
TRL	9

# **PERFORMANCE DATA**

SAR IMAGING	RESOLUTION	0.3 M	1 M
	MAX RANGE	39 KM	55 KM
MOVING TARGET INDICATOR VEHICLE	DETECTION AND TRACKING (GMTI)		24 KM
MARITIME SURVEILLANCE	DETECTION AND GEOLOCATION (SAR)		185 NM (342 KM)
	DETECTION AND TRACKING (MMTI)		126 NM (233 KM)
	CLASSIFICATION (ISAR)		69 NM (127 KM)
	MMTI MAX COVERAGE AT 150 KTAS		17,100 NM²/HR (58,650 KM²/HR)

### **CAPABILITY VARIANTS**

	NSP-7(S)	NSP-7(X)
IMAGING	SAR	SAR
OPERATING MODES	STRIPMAP, SPOTLIGHT, WIDE AREA	STRIPMAP, SPOTLIGHT, WIDE AREA
CHANGE DETECTION	NON -COHERENT (MCD)	NON -COHERENT (MCD)
		COHERENT (CCD)
MOVING TARGET INDICATOR	VEHICLE TRACKING	VEHICLE & DISMOUNT TRACKING
MARITIME SURVEILLANCE	TRACKING, ISAR, SECTOR SCAN	TRACKING, ISAR, SECTOR SCAN
RESOLUTION (METERS)	0.3, 0.5, 1, 2, 5, 10	0.1, 0.3, 0.5, 1, 2, 5, 10

#### **APPLICATIONS**

- Specialized ISR Missions
- Wildland Fire Monitoring
- Coastal Mapping

Railroad Monitoring

Pipeline Monitoring
Sea Ice Detection &

Counter-Narcotics

Monitoring

E. SALES@IMSAR.COM

W. WWW.IMSAR.COM

- Search & Rescue
  - Illegal Migrant Operations
  - And More!

A. 940 S 2000 W #140 SPRINGVILLE, UT 84663

© 2023 IMSAR LLC. NanoSAR<sup>®</sup>, NSP-5<sup>w</sup>, NSP-5<sup>w</sup>, NSP-7<sup>w</sup>, Lisa 3D<sup>w</sup>, Democratizing Radar<sup>®</sup>, IMSAR<sup>®</sup>, and all associated logos are trademarks of IMSAR<sup>®</sup> LLC. All other product or brand names as they appear are trademarks or registered trademarks of their respective holders. The Company shall not be liable for any errors contained herein or for any damages arising out of or related to this document or the information contained therein, even if the Company has been advised of the possibility of such damages. This document is intended for informational and instructional purposes only. The Company reserves the right to make changes in the specifications and other information contained in this document without prior notification.