Eagle Eye







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NEXT-GENERATION SURVEILLANCE RADAR

General Atomics Aeronautical Systems, Inc.'s state-of-the-art *Eagle Eye* radar provides next-generation intelligence, surveillance, and reconnaissance (ISR) for manned and unmanned aircraft. *Eagle Eye's* maritime surveillance, SAR and ISAR imaging, and moving target tracking with SAR full motion video, enable the aircraft to provide high-resolution precision imagery in the most challenging environments and under adverse weather conditions. Ready for any mission, whether domestic or expeditionary, *Eagle Eye* provides a bird's eye view to deliver unmatched situational awareness to the warfighter.

MARITIME



Maritime Surveillance with ISAR Imaging

OVER LAND







SAR Imaging with Precision Targeting

FEATURES/BENEFITS

- All-in-One Solution: True multi-mission capability from a single low-cost/low-SWAP radar package
- Technical Readiness Level 9: GA-ASI multi-mode radars are fielded on over 500 manned and unmanned aircraft
- Ease of Use: Intuitive user interface with mission-centric command and control
- All-Weather Imaging: Generate extremely high-resolution photographic-like imagery and perform long-range precision targeting using spotlight, stripmap, and brickmap SAR
- Moving Target Tracking: Detect and track ground movers using DMTI and GMTI modes
- SAR Full Motion Video: Simultaneously image, detect, and track stationary and moving ground objects from intuitive EO/IR-like SAR video with unprecedented situational awareness and target geo-location accuracy
- Maritime Surveillance with ISAR Imaging: Quickly detect, track, and classify challenging maritime vessels in blue water or littoral environments
- Processing/Exploitation/Dissemination: Change detection; automatic manmade object detection; pattern-of-life analysis; compliant with STANAG and NITF data standards
- Situational Awareness: Artificial intelligence/machine learning-enabled target detection, classification, and automation

SPECIFICATIONS

TOTAL WEIGHT: < 62 kg (137 lb)

INPUT POWER: 28 Vdc, 1.9 kW peak, 1.4 kW average

TRANSMIT POWER: 360W peak, 35% duty cycle

FREQUENCY: 2-channel Ku-band with 3 GHz bandwidth

COOLING: Operates from -55° to +50°C

(sealed conduction cooling)

FIELD OF VIEW: -5° to -60° EI, $\pm 180^{\circ}$ Az (configurable)

SAR RESOLUTIONS: Very fine to 3 m

SAR RANGE: Up to 80 km (50 mi)

MTI RANGE: Up to 60 km (38 mi)

MARITIME SURVEILLANCE

RANGE: Up to 200 km (125 mi)

ISAR RANGE: Up to 150 km (93 mi)

ANTENNA GIMBAL SIZE: 17.1" (H) x 19.5" (D) – swept volume

inside radome

ELECTRONICS

ASSEMBLY SIZE: 23.7" (L) x 10.6" (H) x 12.6" (W)