

TECHNICAL DATA SHEET

HARRIER Security Radars

Airspace Surveillance Marine Surveillance

Model number: SS200 Airspace Surveillance Radar (ASR)/Marine Surveillance Radar (MSR)

Functionality: Supports single- or dual-function real-time airspace and/or marine surveillance with user-definable perimeter risk alerting

Configuration: Available in fixed or mobile (trailer, truck, vehicle) configurations in standard and custom designs

Radar sensor:

- 200w solid-state S-band radar sensor with 50,000 hour MTBF and all weather detection
- X-band and dual X-S band systems available
- Frequency diversity and Doppler processing versions/upgrades in 2010

Features:

- Target-of-interest options include size class, speed and heading with target trails and actual or predictive heading
- Integrates with TCAS, AIS and ADS-B data for consolidated displays
- Multi-function capable for simultaneous airspace & marine surveillance from a single radar sensor
- Ancillary equipment integration with FLIR, video, and other sensors
- Units are fully networkable and support multiple remote display, alerting and control via fiber and wireless networks

Applications: Space launch facilities, civil airports, military airfields & ranges, UAV operations support, ship detection/tracking, perimeter control (air and sea)

Network: TCP/IP supports multi-user remote system display and control via fiber optic (recommended), wireless or cellular



TOP: HARRIER ASR/MSR system at Alaska Aerospace Development Corporation Kodiak Launch Complex providing combined airspace and marine surveillance for rocket launches.

BOTTOM: HARRIER ASR fixed installation system at the Central Wisconsin Airport providing airspace monitoring to 24 nm range



Custom configurations available; specifications subject to change without notice

DeTect's radar processing technology developed specifically for detection and tracking of small, low radar-cross section, non-linearly moving targets make it one of the most sensitive, low cost radar systems on the market today for locating and monitoring a wide range of targets including aircraft, UAVs, ships and boats. The HARRIER security and surveillance radar provides full surveillance coverage ground level to altitudes up to 20,000 feet with ranges out to 30+ miles and allows the system to function as a multi-purpose sensor for simultaneous detection, alerting and tracking of aircraft and vessels. HARRIER is an ideal, cost-effective solution for many force protection and homeland security applications. HARRIER functions include:

- Airspace monitoring & surveillance
- Aircraft detection & tracking
- Marine and coastal surveillance
- Airspace see-and-avoid
- Intrusion detection
- Collision & obstruction avoidance
- Perimeter & shoreline security

Applications:

HARRIER applications include a wide range of sites, types, sizes and configurations from single facilities to large-area or linear radar networks for force protection and facility security, including:

- Commercial airports, civil aviation airports & military airfields & ranges
- Unmanned aerial vehicle (UAV) operations support
- Government installations
- Industrial plants, refineries & power plants
- Ports, waterways & coastlines
- Border control areas
- High security facilities
- Gap filler radars

Interoperability:

HARRIER systems can operate as a standalone security/force protection radar system detecting and alerting perimeter intrusions on land, by air and on water. The system can be programmed to detect intruders crossing a user-defined site perimeter, providing automated notifications to security forces. Alarm functionality can provide notification of security events via pager or cellular phone or direct to remote monitoring stations. HARRIER

ASR systems can also be used as coverage gap filler radars to provide data for large-scale navigation and military surveillance radars in areas blocked by terrain or structures including wind turbine farms.



Integrated Technology:

HARRIER systems use electronically variable high speed scanning (up to 48 rpm) for enhanced small target detection in high clutter environments such as developed areas, terrain and high sea states. Systems are optimized for detection of small targets that includes low-profile manually propelled watercraft, small motorized high-speed watercraft, low flying aircraft and ultralights. Automatic detection and tracking includes user-defined monitoring and alarm zones. Systems are offered in fixed and mobile configurations and can be linearly networked to cover large areas such as border crossings, coastlines and large facilities. DeTect's HARRIER technology is highly customizable providing radar, video, and thermal detection and acoustic deterrent through a single user interface display with advanced alerting and response features all controllable remotely.

Features include:

- Microsoft Windows-based operating software
- Integrated radar, thermal, video, acoustic, sonar & deterrents
- Display activated "point-and-click" video zoom & deterrent activation
- Compatible with other security & display systems
- Site-specific underlay maps includes mobile mapping technology
- Identifies & tracks each target by size, position, speed & heading
- Audible & visual intrusion alarms with optional notification by email & radio pager
- Automated data recording & archiving