



ASR S-Band Solid-State Primary Surveillance Radar



Our ASR S-Band offers proven reliability and performance in a flexible, cost-effective package.

This versatile radar can be configured to handle a wide range of coverage volumes for both approach/departure and extended terminal airspace applications.

Features & Benefits

- Unattended Operation
- Low cost operation
- High system availability
- Large installed base – more than 160 sites in service
- Extensive BITE
- Hot swap LRUs
- Automatic Reconfiguration
- Ease of Operation
- Less than 12 hours per year of scheduled maintenance
- Operator and maintenance training at our world class facility
- Easy-to-use graphical interfaces

Reliable Low-Cost Operation

Designed for unattended operation, our ASR S-Band employs extensive redundancy, high-reliability solid-state design and stringent manufacturing quality control to ensure reliable, low-cost operation and high system availability for the most demanding civil or military applications.

Extensive built-in test equipment (BITE) provides rapid, accurate fault isolation. Automatic reconfiguration means no interruption to radar operation. LRUs are replaced from the front of the equipment cabinets with no cables to disconnect and this allows the system to remain on-line during corrective

maintenance thus enhancing availability to ATC. Redundancy and a fail-soft architecture permit repairs as part of scheduled maintenance rather than as high-cost emergency actions. Scheduled system maintenance is less than 12 hours per year.

Field-Proven Technology & Performance

A proven performer, Raytheon's solid-state ASR S-Band PSR meets or exceeds all current Eurocontrol and ICAO standards. Its design has satisfied the rigorous requirements of the U.S. FAA and Department of Defense, National Air Transportation Services in the U.K., and many other customers around the world.

Commitment & Support

Our commitment to our customers does not end with delivery. With the world's largest base of installed radars we are able to offer superior logistical support, rapid turnaround times and 24/7 hotline service.

Extensive commonality across our S-Band and L-Band products further reduces logistics costs.

Capabilities

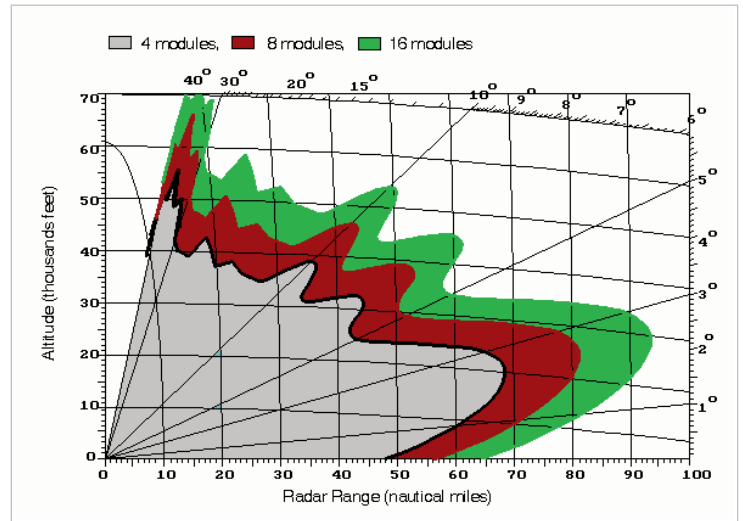
- Efficient high-power air-cooled solid-state transmitter with an established, field-proven design
- Unsurpassed intuitive operator interface for control and monitoring
- Superior aircraft detection in adverse weather conditions using a coherent pulse-doppler transmitter/receiver and advanced digital signal processing
- Automatic plot extraction and scan-to-scan tracking of more than 500 targets
- Extensive algorithms for elimination of false targets
- Interfaces with and combines plots/targets from colocated MSSR, which can include Mode 4 and Mode S capabilities
- Designed for unattended operation, and can be fully controlled and monitored from remote locations
- Integrated facilities monitoring (temperature, fire, smoke, intrusion) customized to site requirements
- Less than 12 hours per year of scheduled maintenance
- Design is compliant with CE EMC requirements and NTIA, UL, and CSA safety standards

Specifications

Frequency (MHz):	2700 to 2900
Pulsewidths (µsec):	1 (SP) and 89 (LP)
Antenna Gain (dBi, nominal):	35
Azimuth Beamwidth (degrees):	1.4
Polarization:	Linear & Circular
Target Tracking Capacity:	> 500 Targets
Inherent Availability:	99.995%
MTTR (hours):	0.5

Pulse Power Options

Transmitter Power Amplifier Modules:	4	8	16
Transmitter Long Pulse Power (kW):	10	21	42



ASR-S free-space coverage (Low-Beam) with 4, 8, and 16 module transmitters (2 sq. m target, 4-Pulse MTD, 0.8 probability of detection)

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Raytheon

Customer Success Is Our Mission