



SAAB



COAST CONTROL RADAR

Rethinking radars

A step-change in coastal surveillance

Saab's Coast Control Radar is a next generation, phased-array, non-rotating and software defined radar designed for installation on existing infrastructure, such as buildings, towers and waterway bridges. Matching the requirements of an extreme littoral environment, it offers a step-change in coastal surveillance.

Rethinking radars

This electronically scanned array radar provides the awareness required to protect your coast and secure your borders without the high installation and maintenance costs of a traditional rotating radar. It excels at identifying objects, regardless of their size, speed, or distance. It can simultaneously track numerous objects and provides high-resolution detail even on smaller targets.

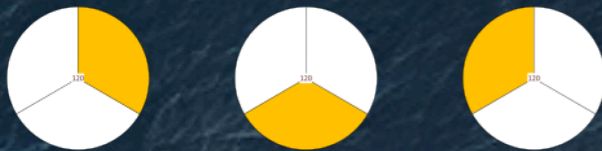
Proven modern technology

Saab is now making the power of AESA radar technology, typically found in military applications, available for dual-use purposes. Our Coast Control Radar leverages this advanced phased array technology, renowned for its reliability and performance, and combines it with our deep expertise.

Customers worldwide rely on Saab for fast and accurate information through extended range and volume coverage. Superior update rate and state of the art, proven, clutter suppression maximises the time available to act in critical situations.

Compact design for minimum footprint

Coast Control Radar provides a minimal size footprint and low weight for easy installation. It can be installed to discretely blend in and its modular design allow it to be combined for up to 360° coverage.



Each sector covers 120 degrees

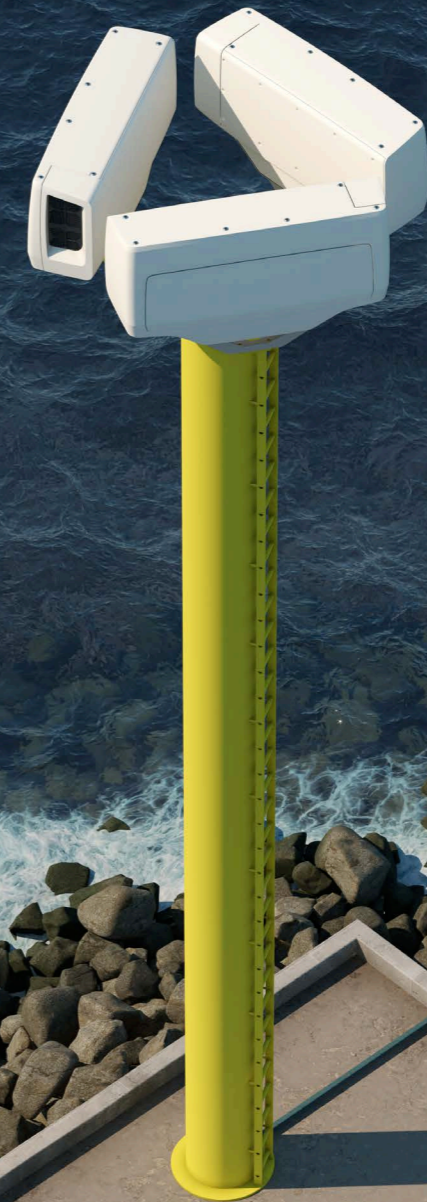
Increased availability, reduced life-in-service cost

Coast Control Radar provides unrivalled system availability, with high Mean Time Between Failure (MTBF) and advanced Built-In Test (BIT) capabilities, greatly reducing maintenance and repair costs over time.

Reduced service intervals, minimal operator training and condition-based maintenance will significantly contribute to minimise the total cost of life-in-service ownership compared to rotating radars.

Characteristics

- Reliable, cost effective non-rotating surface surveillance
- Multi-tracking capability – simultaneous tracking of several objects
- Small target detection 1 m² Radar Cross Section (RCS)
- Fine resolution on targets with small RCS
- Better, more accurate extraction of targets through high update rate
- Interoperable with modern command & control systems
- Power efficient in a compact, lightweight design
- Reliable design provides lower life cycle cost
- Flexible installation on existing infrastructure
- High level of automation increases the operator's ability to focus on what is most important
- Future proof due to upgradeable software





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Digital radar advantages

- Advanced signal processing – stronger situational awareness
- Clutter suppression – less induced noise
- Simpler installation options – no vibrations induced by the system or wind
- Adaptive control capabilities – full beam control, dwell time adjustment, power output (duty cycle/ peak power)
- Patented antenna design – designed for AESA radar



Technical information

Target detection performance

- Maximum detection ranges: Exceeds IALA Advanced standard by far
- Maximum targets per scan: typically up to 100
- False Alarm Rate (FAR): very low (typically 10^{-5})
- Minimum detectable target radial velocity: Greater than 0 kn (0 km/h) for 1 m² RCS

Coverage

- Instrumented maximum range: Continuously variable from 3 to 80 NM
- Instrumented minimum range: 50 to 100 m
- Azimuth scan angle: 120° volume covered with <1° beam at boresight using scan then track scheduling.
- Up to 3 units (360° coverage) can be co-located.

Target output and identification

- Data format: JSON RESTful API (or CAT010) open-standard data format with Doppler
- Data format: CAT 240 clutter video

Electrical power

- Power supply input voltage range and type: From 220 V (AC)
- Power consumption (from 220 V): 1500 W (nominal)

Physical, environmental & reliability

- External dimensions of radar unit(s) (W x H x D): 2.3 x 1.0 x 0.7m
- Operating temperature: from -10° C to +55° C (+14° F to +131° F)
Note: -40° C to +45° C arctic version available
- Humidity: 5% to 95% relative humidity (RH)
- Marinsation/environmental compliance: Compliant with IEC
- MTBCF: Very long, typically several years of continuous operation

Saab Ltd

Postal address PO Box 106287, Abu Dhabi, UAE
Visiting address Tawazun Industrial Park, Al Ajbai, Abu Dhabi, UAE
Telephone +971 2 506 9333
E-mail info.saabuae@saabgroup.com

saab.com

Specifications subject to change without notice.
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