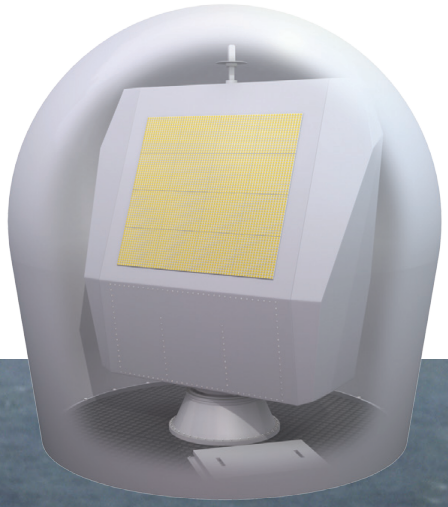
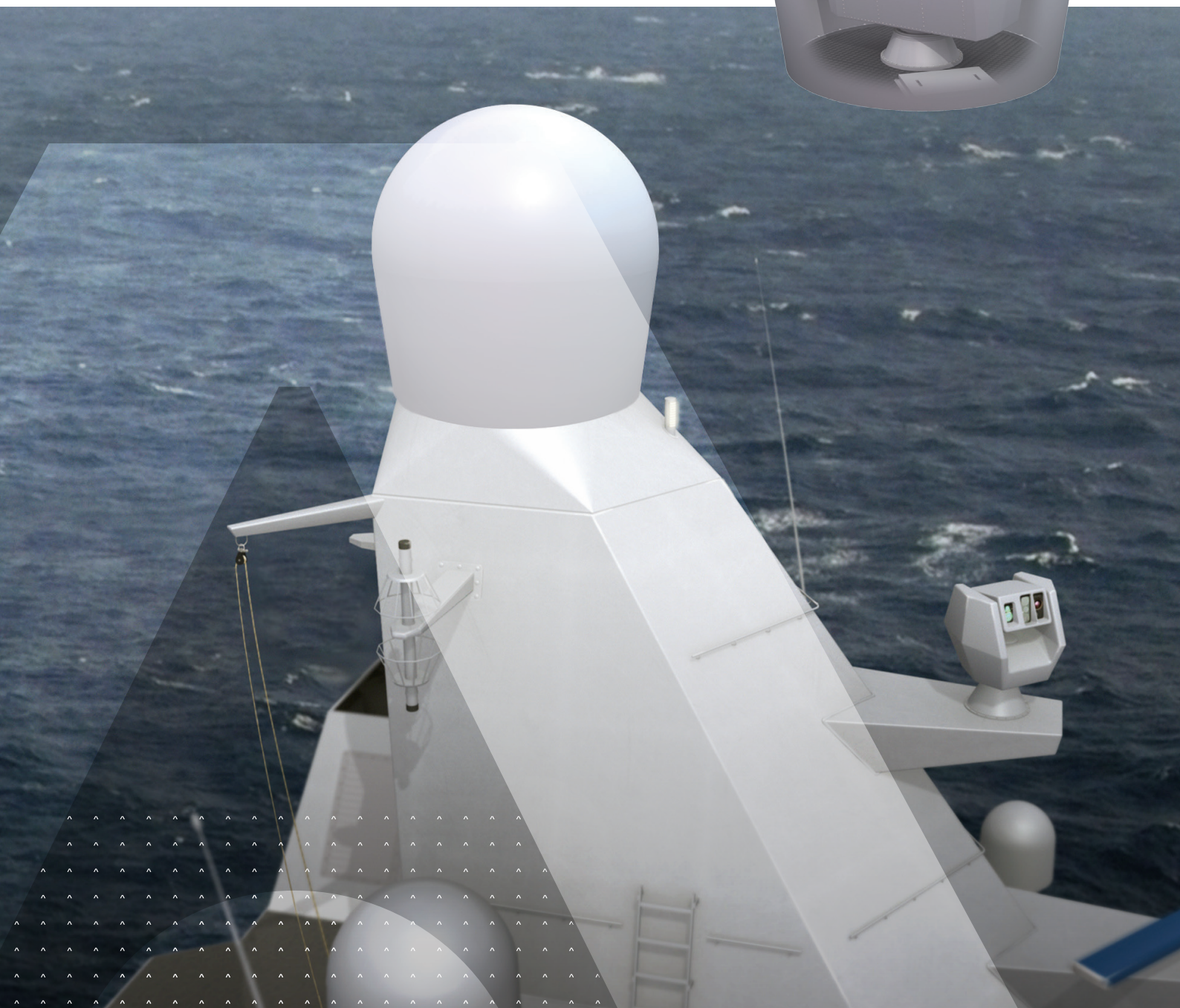
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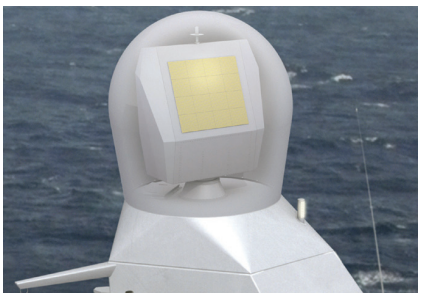
THALES
Building a future we can all trust

NS50

Short to medium range
AESA air & surface surveillance radar







NS50

NS50 is the latest Thales 4D Active Electronically Scanned Array (AESA) surveillance radar. '4D' radars not only provide bearing, range and elevation (3D) information, but also provide in-depth analysis of the target's Doppler and ten times more time on target (the 4th dimension) by applying dual-axis multi-beam processing. The result is a vastly superior air and surface detection, tracking and classification performance. NS50 provides highly accurate 4D target information required for rapid acquisition by Fire Control Systems, for fire control of short-range "fire and forget" Surface-to-Air-Missile Systems and for fire control of ship-borne artillery against surface targets. NS50 is a software-defined sensor that features a modular and scalable hardware architecture, which makes it equally suitable for combat boats, OPVs, MCM vessels, auxiliaries and various other platforms.

NS50 Features:

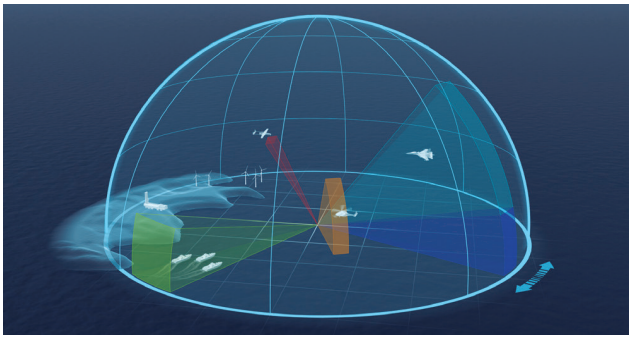
- Simultaneous air and surface target detection and tracking
- Fire control
- IFF data handling (IFF plot-track data correlation)
- Jammer detection and tracking
- Provision of surveillance video
- High availability and graceful degradation
- Maintenance support

Dual Axis Multi-Beam and Weapon Support

Dual axis multi-beam enables simultaneous detection of a high variety of targets in a single operational mode. Detection beams are simultaneously positioned in elevation as well as in azimuth direction. Besides providing unrivalled air and surface surveillance performance, NS50 also includes multi-function capabilities. By adding forward and backward scanning, excellent situational awareness is combined with fast track initiation and high quality weapon support for high priority targets.

The Power of 4D

The nature of threats has never been more varied nor more challenging. They range from next generation anti-ship missiles, to robotic warfare and swarm attacks, to electronic warfare (jamming) as well as, overall, having to operate in a simultaneously conventional, asymmetric and hybrid threat environment. Time and quality of information are critical when facing this new array of unpredictable simultaneous threats. That means having maximum time on target for your radar to evaluate the threat and take countermeasures while, at the same time, understanding what is around you to safeguard yourself and protect your own allied forces.



Technical Characteristics	
Antenna type	AESA, Dual axis multi-beam
Frequency band	X-band (I-band)
IFF Antenna	Integrated and fit for Mode 5 and Mode S
Antenna rotation rate	15 or 60 RPM

Operational Performance	
Maximum instrumented range	180 km
Elevation coverage	70°
Tracking capacity	1000 tracks
Gun fire support	3 fire control windows

Installation Data	
Height	< 2.5 m
Width	< 2.5 m
Below deck footprint	2 below deck cabinets
Power requirements	115V, 230V, 440V
Cooling requirements	Cooling fluid

THALES – Zuidelijke Havenweg 40 - 7554 RR Hengelo - The Netherlands – Tel: +31 74 248 8111 – Fax: +31 74 242 5936
E-mail: info@nl.thalesgroup.com > www.thalesgroup.com <

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