

With this newest member of the S-band AESA radar family, Thales is the first to introduce Dual axis multi-beam. This significantly enhances the situational awareness in a littoral environment. It is the most flexible radar on the market today. This makes the NS100 suitable for a wide range of naval ships.

3D Surveillance radar

- Dual axis multi-beam using AESA technology
- Multi-sensor integrated platform
- Highly scalable; suitable for a wide range of ships
- Weapon support for active missiles

NS100

Dual Axis Multi-Beam Air
& Surface Surveillance Radar





NS100

Rotating - all in one mode superior performance

Dual axis multi-beam using AESA technology

This new concept enables simultaneous detection of a high variety of targets in a single mode. Detection beams are simultaneously positioned in elevation as well as in azimuth direction. By adding forward and backward scanning, the NS100 supports various capabilities such as missiles support, UAV control, swarm defence and anti-piracy.

Multi-sensor integrated platform

Integrating sensors in the NS100 increases the overall system capability and solves footprint issues on-board. Positioning all sensors at the best topside position also optimizes the overall field of view.

- Scout Mk3 FMCW radar for LPI and dual band surface surveillance
- IR camera for nearby situational awareness
- AIS
- ADS-B
- IFF Interrogator and Transponder

Highly scalable; suitable for a wide range of ships

The highly modular and scalable NS100 enables a tailor-made sensor for customer specific requirements and operational profile. Radar performance is increased by adding RX and TX Building Blocks, answering to the need of a wide range of naval ships and missions. This leads to fleet-wise logistic advantages. Furthermore, the flexible radar architecture enables through-life introduction of new capabilities.

Main Features

- Dual axis multi-beam with instantaneous mono-pulse accuracy in azimuth and elevation
- Instantaneous Doppler processing for the full range, azimuth and elevation coverage
- Fast track initiation
- Active tracking for high priority targets
- Dedicated ECCM techniques.
- Multipath suppression using beams under the horizon
- High MTBCF and graceful degradation
- Status: under contract

Operational Performance

Maximum instrumented range	200 Km
Minimum Range	150 m
<ul style="list-style-type: none"> • 3D Air Surveillance/Weapon support for active missiles • 2D Surface Surveillance • Surface Gun Fire Support • Jammer Surveillance • IFF Interrogation Support (IFF mode S and 5 compliant) 	

Installation data

Height	3 m
Width	3 m

Technical Characteristics

Antenna Type	Active Electronic Scanning Array (AESA)
Elevation coverage	Up to 70°
Frequency band	E/F-band
IFF antenna	Integrated and fit for mode 5 and mode S.
MTBCF	>3000 hrs



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