# THALES

SMART-S Mk2 is a modern naval air and surface surveillance radar that applies the unique multi-beam concept. Its high reliability and stealth target detection, even in cluttered environments, support long missions and operation in littoral environments. The SMART-S Mk2 is very easy to operate by only two fully automatic operational modes. Furthermore the SMART-S Mk2 is easy to install and integrate and easy to maintain.

- Excellent performance in the littoral environment
- Situational awareness and fast target acquisition
- Easy to operate and maintain
- High reliability to support long missions
- Sea proven and an extensive sales record

# **SMART-S Mk2** 3D Surveillance Radar





#### Main Features

- Multi-beam with full Doppler processing within each beam
- Two operating modes: Surveillance and Defence
- Fully automatic detection and tracking of air and surface targets
- Dedicated ECCM techniques
- Multipath suppression using beams under the horizon
- Graceful degradation thanks to multiple solid-state transmitters

# **Functional Aspects**

- 3D Air Surveillance with Fast Target alerts
- Surface Surveillance
- Surface Gun Fire Support
- Jammer Surveillance
- IFF Interrogation Support

## Performance Data

- Maximum Instrumented range : 250 km
- Maximum elevation coverage : 70 degrees
- Minimum Range : 150 meters
- Tracking 3D capacity (Air+Surface) : 500 targets
- Surface Fire Control Windows : 3
- Elevation accuracy
- Bearing accuracy : < 5 mrads
- Range accuracy
- Detection performance:

' Small missile	: ~ 50 km
MPA	: ~ 200 km

# Technical Data

#### System:

- Two operating modes: medium range up to 150 km at 27 RPM and long range up to 250 km at 13.5 RPM

: approx. 2 degrees

: 13.5/27 RPM

: Wide beam and Narrow beam

: < 10 mrads

: < 20 meters

- Fully automatic detection and tracking.
- Dedicated ECCM techniques.

# Antenna:

- Horizontal beamwidth
- Illumination patterns
- Antenna rotation speed

- Integrated IFF antenna

- Stabilisation - Very low sidelobes
- : electronic

## Transmitter:

- Frequency band
- Type
- communication bands) : Solid State transmit modules

: E/F-band (excl. ATC and

- integrated in Antenna - Transmitting modes : sectorwise reduced or full power
- Broadband frequency operation and frequency agility

# System Overview



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