

## Small Target Detection in all Weather Conditions

### SCANTER 4100 Series Naval Surveillance Radars

#### Featuring

Air Situational Awareness, Medium range coverage (90 nmi)  
Surface Situational Awareness (to radar horizon)  
UAV and Helicopter control

#### Techniques

2-D, Fully Coherent, Software Defined Functionality, TWT, Pulse Compression Radar  
Frequency Diversity and Time Diversity with Automatic Adaptation to the environment  
Normal radar ant MTI processing  
FiveStepVideoPassing™  
Track-While-Scan support  
Multi-profile operation optimized for customer application, max. 16 profiles  
Two-channel simultaneous processing (Surface & Air)  
Advanced Integrated BITE system

#### Frequency

Programmable frequencies within 8850-9000 MHz, X(I)-Band

#### TWT Transmitter

12kW Peak Power, 600W Average power  
Sector Transmission

#### Receiver

Dynamic range ≥120dB, Digital sampling on IF

#### Embedded tracker

Surface targets, max. 500 tracks  
Air targets, max. 100 subsonic and supersonic tracks

#### Interfaces

Interfacing with standard protocols (Ethernet, RS232, RS422)  
Simple interface implementation (ASCII, NMEA)

#### Design

Air-cooled racks (below deck)  
Water-cooled racks (below deck)

#### Antenna Systems

10', 12' or 15' High Gain HP/CP antenna, 8-46 RPM  
Integrated IFF antenna  
Stabilizing platform

SCANTER  
4102



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• Standard ○ Optional  
Specifications subject to change

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# SCANTER 4100

## Naval Air & Surface Surveillance 2D Radar

### Seeing the Unseen...

TERMA<sup>®</sup>

TERMA<sup>®</sup>





### SCANTER 4102 Naval Air & Surface Surveillance Radar

The SCANTER 4100 enables the user to detect and track both air and surface targets under difficult sea and weather conditions.

Terma SCANTER Radar Systems excel in signal processing. This, combined with frequency diversity and time diversity in the X-band, enables the SCANTER 4100 to provide a clear and highly detailed situational awareness picture.

#### Operational tasks

The SCANTER 4100 supports naval as well as enforcement tasks e.g.:

- Early detection of small surface threats
- Medium range 2D air surveillance
- UAV and Helicopter control
- Missile detection
- Track information for weapon systems
- General Air and Surface Situational Awareness
- Search and Rescue

#### Versatile and Flexible Radar

The Radar System can be configured with different antenna systems e.g. 10, 12 or 15ft antennas with or without stabilizing platform and integrated IFF antenna.

The SCANTER radars can easily be integrated with the customer's Command Management System or Fire Control System. The Radar system can also be supplied with a dedicated radar console.

#### Designed for Naval and Coast Guard vessels

SCANTER 4100 Naval Air & Surface Surveillance 2D Radar is often used on several ship classes e.g.:

- Offshore Patrol vessels
- Large Support ships
- Landing platforms
- Corvettes / Frigates



#### Surface Surveillance

The SCANTER 4100 provides unsurpassed surface detection and tracking capability of small targets from close range and up until the radar horizon in all weather conditions.

#### Air Surveillance

The SCANTER 4100 provides a 2D Air surveillance picture up to 90 nmi and 35.000ft. It can track both subsonic and supersonic aircraft.

#### UAV and Helicopter control

It supports operation of both UAVs and helicopters. Helicopters can be detected beyond 30 nmi and followed onto close proximity to the ship (150m).

#### Missile detection

The SCANTER 4100 is able to detect incoming sea-skimmer missiles allowing for timely counter measures.

#### Track information for weapon system

The accurate tracker allows for transmission of target data to the Command Management System or Fire Control System for target designation.

#### Situational Awareness

The high resolution picture of both air and surface provides the operator with an excellent general situational awareness picture for self protection.

#### Search & Rescue

The combination of detection of small surface targets and helicopter control makes the SCANTER 4100 extremely well-suited for supporting SAR.



SCANTER 4102 Transceiver & Utility racks with water-cooling  
Dimensions: H: 2067 mm, D:1287 mm, W:1210 mm