

# VisionMaster Naval Radar

Enhanced Radar Performance for Navies and Coast Guards



Tactical maneuvering and hardened defense operations, leveraging dedicated naval features for safe navigation and comprehensive threat management.

# VisionMaster Naval Radar

Whether deployed as a stand-alone radar on a police patrol boat or as fully redundant, multi-node navigation system on a naval frigate, VisionMaster Naval Radar provides fleets with scalability and modularity in a tactical application approach.

Recognizing the needs of naval customers, VisionMaster Naval products have been developed to provide advanced navigational support for the toughest naval operational assignments. VisionMaster Naval Radar can be configured to Chart Radar, benefiting from the overlay of VisionMaster Naval ECDIS with AML or being upgraded to a multifunction workstation with TotalWatch.



Trusted by NATO member states and navies worldwide, the VisionMaster Naval Radar offers a proven, flexible solution for Integrated Naval Navigation.

When combined with TotalWatch capability, VisionMaster Naval Radar is a fully redundant multifunction system for the bridge and combat information centre.

VisionMaster Naval radars are built for performance, offering exceptional return on investment with navigation and tactical capabilities without the high cost associated with most high end surface search radars.

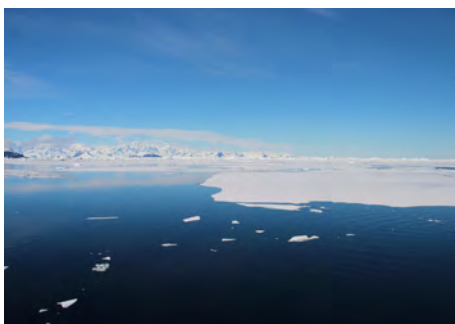
## Standard Features

<b>Radar, Chart Radar functionalities</b>	<ul style="list-style-type: none"> <li>• Enhanced Target detection</li> <li>• Chart radar overlay</li> <li>• Alarm Management</li> <li>• AIS and tracked targets</li> <li>• Operational mode (Open Sea, Confined Waters, Berthed, Offline)</li> </ul>
<b>SAR Patterns</b>	<p>Enables special Search and Rescue (SAR) patterns that can be used to patrol a given area including parallel line, creeping line, expanding box and sector search mode. Supports the creation of custom SAR patterns and routes.</p>
<b>Target Intercept</b>	<p>Supports planning and executing interception manoeuvres between vessels by calculating the optimal course and displaying it with graphical intercept vectors indicating the predicted interception point.</p>
<b>Helicopter Approach Sector</b>	<p>The helicopter approach sector is shown on screen to help the operator monitor and guide helicopter approaches, especially in poor visibility, either on the own ship or on tracked or AIS targets.</p>
<b>Optional: High/Standard Scanner Rotation Speed</b>	<p>Radar display has been developed to support integration with scanner systems operating at standard and high rotating speeds, from 24-32 rpm up to 44-52 rpm.</p>
<b>Optional: Transceivers Additional Facilities</b>	<p>Radar silence, pre-trigger output, unprocessed video output.</p>

## Additional Naval Features<sup>1</sup>

Red First Strike	Provides an immediate indication of fast moving targets, such as fixed and rotary wing aircraft and fast attack craft, by highlighting them in red. This improves operator reaction time by simplifying the identification of potential threats.
Station Keeping	Station keeping enables the operator to verify that vessels in a convoy are keeping their correct position with respect to own ship.
Drop Line	The Drop Line can be used to manage targets of interest and reduce screen clutter and unwanted target alarms.
Remote Marker Input	A Remote Marker is generated by data received from an external source on ship. The marker position is determined by the range, bearing and bearing reference with the marker message.
Advanced Index Lines	Advanced Index Lines are used by navies for blind pilotage operations. VisionMaster Naval displays allow up to 15 index lines to be displayed simultaneously in groups of five.
Enhanced Test Targets	Enables moveable test targets' velocity and turn parameters to be defined.
Transmission Sectors	Enables either up to four transmission sectors or up to four blanking sectors to be defined either relative to heading or to north.
Remote Marker Output	Enables the cursor's position to be regularly provided to other nodes on the system.
Target Identification	Enables the desired on-screen target ID to be displayed by selecting the corresponding combination of check box options.
Naval Alerts	Lists alerts specific to a navalised system.
Access Control	Restricts which users can change the selected transceiver or monitored route.
Limiting Danger Lines	A manual chart update that can be used to mark the limit between safe and unsafe water for a given tide height.
Target Identification	Adds the ability to see radar targets tracked on other displays and targets received from other systems (external targets) on the radar display
Freeze Frame	During times of radar silence, the operator can be provided with a frozen picture of the radar situation taken before the radar silence was imposed by using the 'Freeze Frame' function.
Night Red Mode	Improves night operations to ensure operators' preservation of their night vision.
Optional: Agile Target Tracking	Enables fast moving and highly manoeuvrable targets such as aircraft to be successfully tracked (up to 600 kn).

## Operations in arctic conditions



For arctic or polar missions, allied navies regularly operate in icy waters where temperatures can go below -40°C. Radar failure in these conditions could lead to navigation errors, collision risks or undetected threats.

Therefore, it is critically important to have radar equipment capable of withstanding these polar conditions.

VisionMaster Radar sensors can operate in temperatures down to -40°C or even -55°C with the use of the VisionMaster winterisation heater kit. This extends the operational range of the radar system, ensuring safety and strategic advantage.

<sup>1</sup> Additional naval features are subject to Export Restrictions

## You may also be interested in:



### VisionMaster Naval

All Sperry Marine VisionMaster Naval products at a glance.



### NAVIGAT 3500

Adding highest heading accuracy and motion reference data to your bridge, especially when sailing in high latitude.

## Global Service and Support

Sperry Marine provides service and support on a 24/365 basis at every major port worldwide, at anchor, offshore and at sea. All Marine Service Engineers are all certified to ensure they install, maintain and repair our products to the industry's highest standards on a consistent global basis. Please see [www.sperrymarine.com/service](http://www.sperrymarine.com/service) for full details of all our service locations.

## Find out more

Please visit [www.sperrymarine.com/solutions/radar/visionmaster-naval-radar](http://www.sperrymarine.com/solutions/radar/visionmaster-naval-radar) for more information on Sperry Marine's naval radar product line. If you would like a quotation, please email [sales@sperrymarine.com](mailto:sales@sperrymarine.com).

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