

**Sperry Marine**

**NORTHROP GRUMMAN**

# VisionMaster Net



**The Networked Bridge Solution**

# VisionMaster Net

## The networked bridge solution from the industry leader for system quality and support

Simplifies deployment, increases system availability and creates foundation for big data on the vessel to improve operational efficiency, while reducing through-life costs.

Current Integrated Bridge Systems are often cable intense, with many point-to-point connections between components that are slow to install, difficult to service and typically less resilient.

Functionality is often hardware-based, which is costly to maintain if a service engineer is required on board or components need to be replaced. And such systems do not enable the ship-to-shore data that will drive improved operational efficiencies.

VisionMaster Net is the networked bridge solution that simplifies deployment, increases system availability and creates the foundation for big data on the vessel to improve operational efficiency, while reducing through-life costs.



## Simple.

### Easy to install

VisionMaster Net's distributed architecture makes installation much easier, with fewer components to connect and less cables to pull.

All elements have industry standard interfaces for either CAT6 Ethernet or fibre optic cabling, to meet any cable length requirements and any bridge layout.

### Easy to integrate

The system is designed as a modular network over an Ethernet ring for all sensors required in a bridge system, including the radar transceiver.

Any combination of VisionMaster Net and third party equipment can be easily integrated into any configuration to create a networked bridge solution for any vessel.

### Increased flexibility

VisionMaster Net allows more flexibility in how displays are configured. Any data feeds can be shown on any screen to optimise situational awareness.

The system's panel PCs take up less space and allow more flexibility in designing the bridge layout. And the overall reduction in system components make it suitable for installation on the smallest vessels to the largest container ships.

### Easy to use

VisionMaster Net uses the same intuitive interface as VisionMaster FT, with the same uniform presentation of screens to streamline navigational tasks and optimise time for observation and decision-making. This minimises the need for re-training, which simplifies implementation.



## Solid.

### Increased resilience

VisionMaster Net's ring topology provides a higher level of redundancy than conventional point-to-point systems.

It also supports dual-homed LAN configurations for full redundancy, ensuring there is no single point of failure.

And the system's simplified design, with less components, less connections and less cabling, helps increase resilience and overall system availability.

### Complete support

VisionMaster Net is backed up by Sperry Marine's global service network, which is one of the most extensive in the industry.

This encompasses over 150 in-house service engineers based in 20 offices worldwide, complemented by more than 100 service representatives. All marine service engineers are continually trained and certified to the highest standards.

They provide a full turnkey service from requirements analysis, installation, preventative service and maintenance, to provision of spare parts and on-call shipboard services in every major seaport on a 24/365 basis to minimise operational downtime.

## Smart.

### Improved operational efficiency

VisionMaster Net provides the foundation for "big data" on the vessel, to collect whatever navigational data is needed from ship sensors to improve operational efficiency.

It enables smart maintenance of on-board systems to reduce downtime and through-life costs, and improve in-port turnaround times when repairs are required.

It supports e-navigation for ship-to-shore route planning and optimisation, so changes can be made during the passage to reduce fuel costs, meet schedules or avoid bad weather.

### Reduced through-life costs

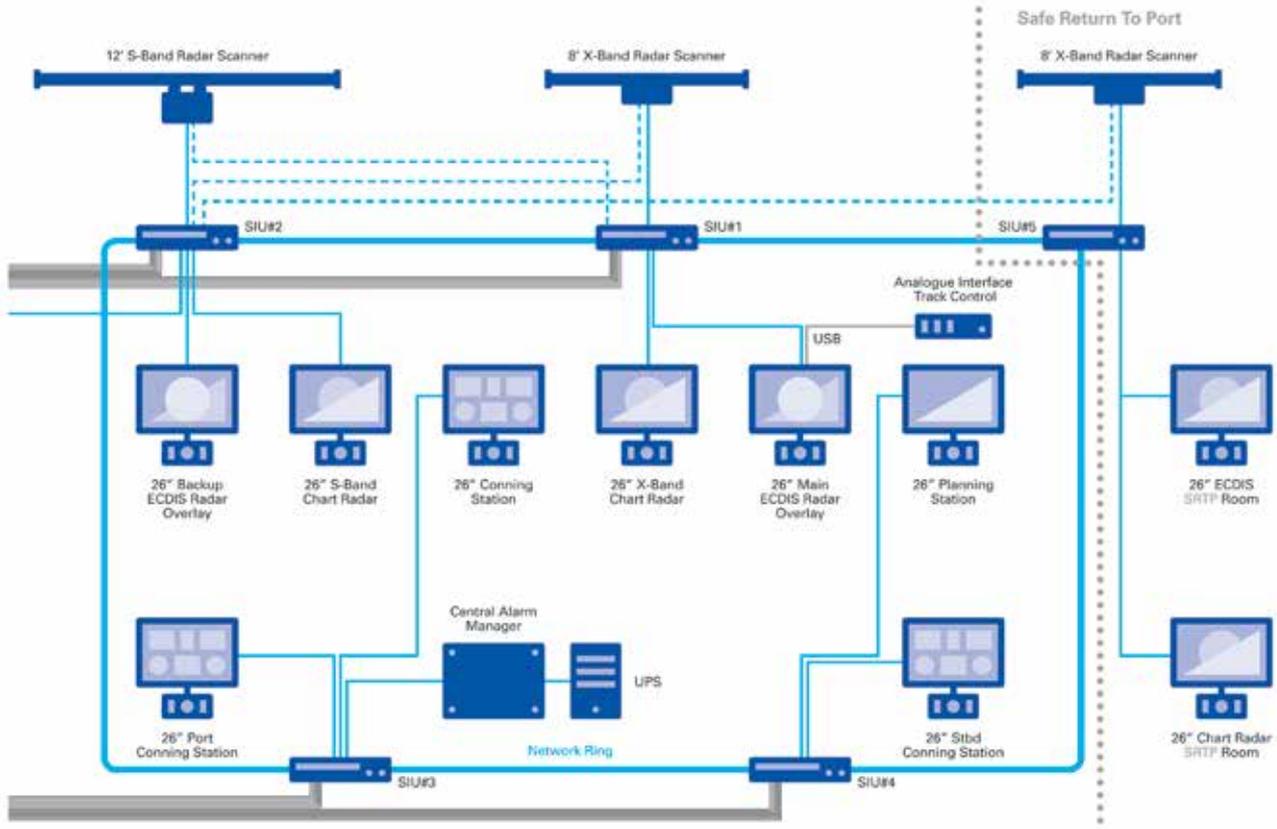
VisionMaster Net is designed to be more cost-efficient throughout the system's life. Its distributed architecture reduces the number of components to connect and therefore labour costs to pull and terminate fewer cables.

Industry standard interfaces across all components allow the use of CAT6 Ethernet or fibre optic cabling rather than higher-cost custom cables.

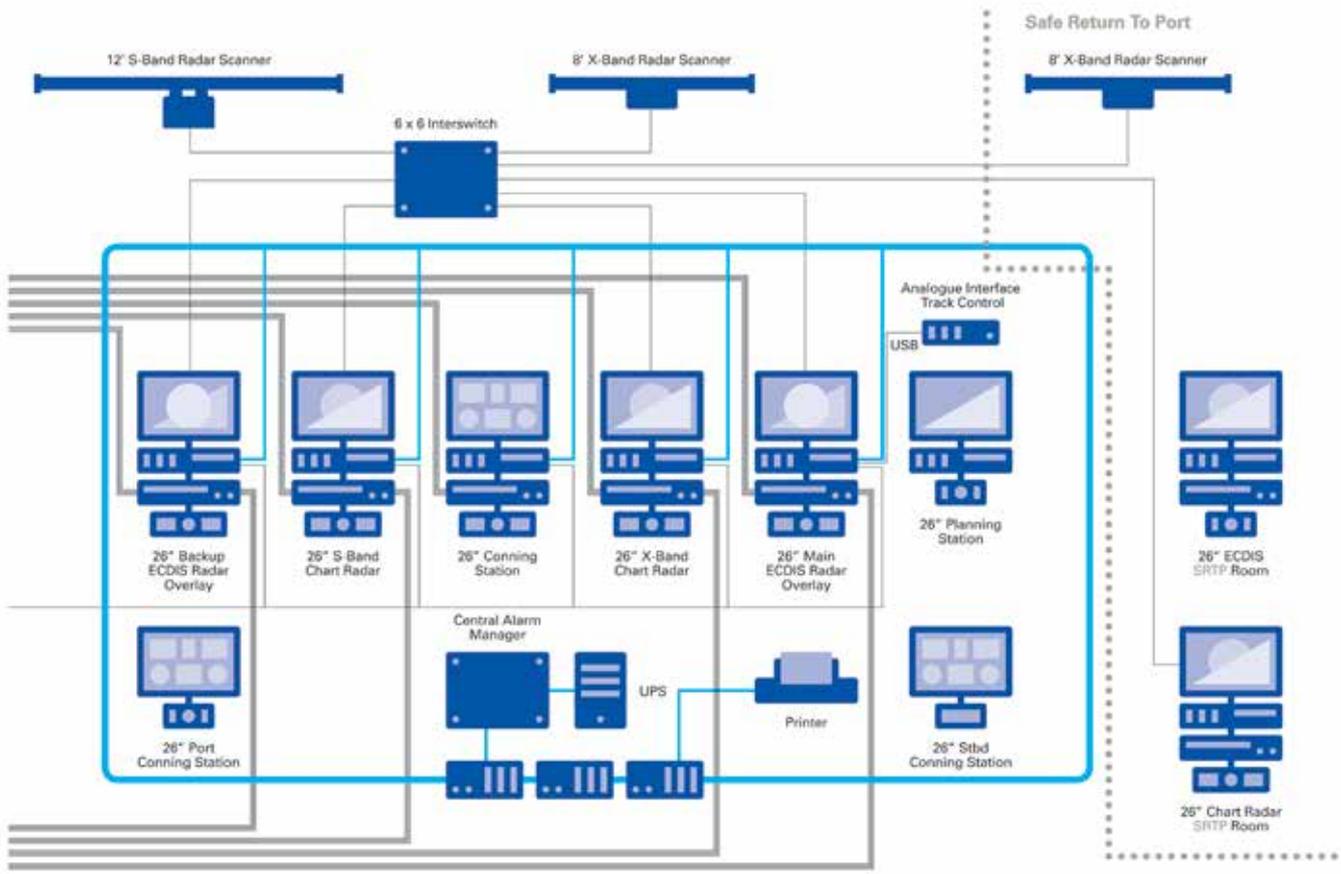
Increased software functionality removes the need for an interswitch, while enabling more efficient upgrades instead of costly hardware replacement.

# Network architecture comparison

## VisionMaster Net



## VisionMaster FT





## System Comparison

Current Integrated Bridge Systems	VisionMaster Net
High number of non-standard components	Reduced number of components
High number of cables	Simplified cabling
Specialised cabling	Standard Ethernet / fibre optic cabling
Point-to-point connections	Ring topology
High installation costs	Low installation costs
Hardware-oriented solution	Software-oriented solution

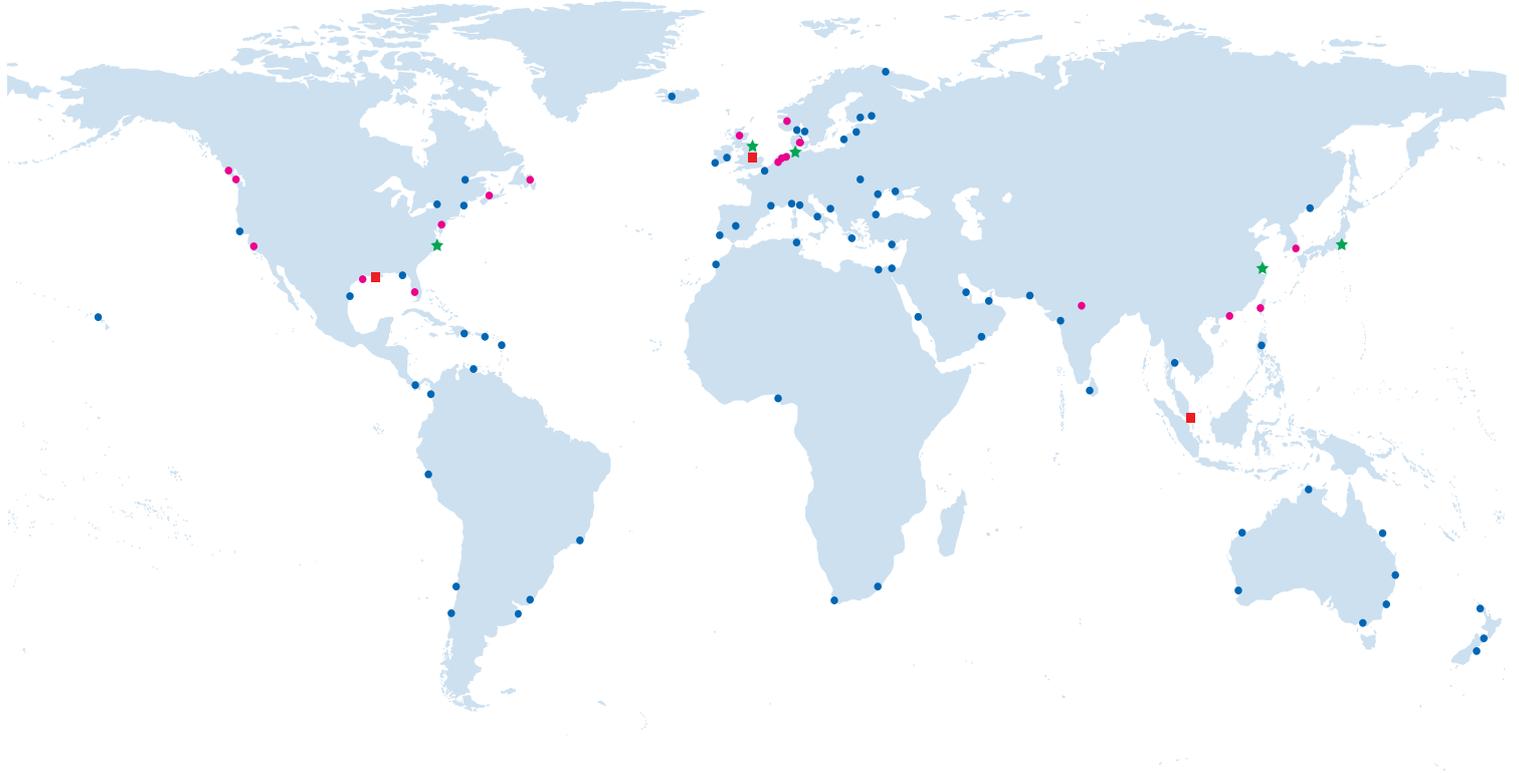
## Complete solution

VisionMaster Net provides the infrastructure for a networked bridge solution that incorporates the full VisionMaster Net family of products: Radar, Chart Radar, ECDIS, Conning Information Display, Central Alert Manager and TotalWatch. All VisionMaster Net products are designed with common hardware platforms and a consistent user interface for more efficient bridge management and enhanced safety at sea.

Northrop Grumman Sperry Marine's service begins with the design and supply of products in the VisionMaster Net range. We also help select any other products needed and work closely with you to design and prepare your own networked bridge solution, combining the functions of our own navigational equipment and that of other manufacturers.

## 24/7 Service

Our global service network provides prompt shipboard maintenance and repair services in every major seaport in the world, 24 hours a day, 365 days a year.



● Sperry Marine Service/Sales locations   ● Sperry Marine Service Agents   ■ Regional Head offices   ★ Gyrofin offices

For more information, please contact:

### EUROPE & AFRICA

24-Hour Service  
Tel: +31 (0) 10 44 51 630  
Fax: +31 (0) 10 44 51 632  
service.eu@sperry.ngc.com

### ASIA & OCEANIA

24-Hour Service  
Tel: +65 6274 3332  
Fax: +65 6271 3339  
service.asia@sperry.ngc.com

### NORTH & SOUTH AMERICA

24-Hour Service  
Tel: +1 504 371 8365  
Fax: +1 504 371 8368  
service.us@sperry.ngc.com

[www.sperrymarine.com](http://www.sperrymarine.com)

A division of the Northrop Grumman Corporation, Sperry Marine provides a range of sophisticated navigation solutions for mariners around the world: autopilot and steering control systems, compass systems, integrated navigation and bridge systems, integrated platform management systems, speedlogs, navigation radar and ECDIS. Working with mariners around the globe for over 100 years.

Specifications and features subject to change without notice.  
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