

# TYPE APPROVAL CERTIFICATE

Certificate no.:  
**TAA00000DH**  
Revision No:  
**16**

**This is to certify:**  
**that the Conning Display**

with type designation(s)  
**VisionMaster Net**

issued to  
**Sperry Marine B.V. - UK Branch**  
**New Malden, Surrey, United Kingdom**

is found to comply with

**DNV rules for classification – Ships**  
**IMO Res. A.694(17) General requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids**  
**MSC.191(79) Performance standards for presentation of navigation-related information on shipborne navigational displays**

## Application:

**See page 2.**

**Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.**

Issued at **Høvik** on **2025-02-25**

This Certificate is valid until **2029-02-11**.

DNV local unit: **Southampton**

Approval Engineer: **Steinar Kristensen**



for **DNV**

This document has been digitally signed and will therefore not have handwritten signature

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

## Product description

VisionMaster Net Conning Display is available either as a part of a Multi Function Display (MFD) or as a dedicated Conning Display, consisting of the below modules:

### VisionMaster Net Hardware modules, alternative 1:

Unit	Description	Type Number	Comment
Computer & Display	26" Panel PC or 27" Panel PC	67026AA or 67026AB  67027AB	
Interface Unit	PCIO Interface Unit	65900AX	X= A or B 9x RS422/RS232 inputs 6x RS422/RS232 outputs <sup>*)</sup>
Control Panel	Control panel with trackball + keyboard (Integrated or Kit)	67003AH or 67003KH	3x USB connectors

### VisionMaster Net Hardware modules, alternative 2:

Unit	Description	Type Number	Comment
Computer	Processor unit	67001AB	
Display	27" display unit	67027M	
Interface Unit	PCIO Interface Unit	65900AX	X= A or B 9x RS422/RS232 input 6x RS422/RS232 outputs <sup>*)</sup>
Control Panel	Control panel with trackball + keyboard (Integrated or Kit)	67003AH or 67003KH or 65903KH or 65903AH	3x USB connectors 3x USB connectors 2x USB, 1x PS2 connectors 2x USB, 1x PS2 connectors

<sup>\*)</sup> Transmission of NMEA messages is not a feature within the Conning Display

All units listed above are to be installed in a protected environment, i.e. indoor.

### Software modules

- Operating System:
- VisionMaster Net:

### Version

Windows 10 IoT Enterprise LTSC, Version: 1809  
 5.0.x

## Application/Limitation

- The system is to be installed as specified in equipment manuals.
- The "Ownship" view in the VisionMaster Net Conning Display is found to comply with requirements for Conning Information Display for the additional class notations NAUT(AW) and NAUT(OSV) as specified in the DNV Rules Pt.6, Ch.3, Sec.3 and Sec.5 (July 2024, as amended).
- The VisionMaster Net Conning Display has been tested in a MFD system with functions for ECDIS and Radar.
- The VisionMaster Net Conning Display does not issue alerts, hence testing according to IEC 62923-1 and IEC 62923-2 is deemed as not being applicable.

## Tests carried out

- Environmental testing: IEC 60945 (2002) incl. Corr.1 (2008)
- Serial interface testing: IEC 61162-1 (2016) and IEC 61162-2 (1998)
- Presentation of navigation information: IEC 62288 (2021)
- Performance testing: DNV Type Approval program 847.60 for Conning Display

## Type Approval documentation

DNV No	Document ID	Rev.	Description
143	23-18343	2023-11-21	Report: Aucoteam, Environmental test report for Modular I/O System DCU32/ BRC32
141	1137	2024-01-25	Certificate: BSH, Compass Safe Distance for MCU32/BRC32, DIM8, DOMOC_8, DOM230_4, AOM12_1, AIM12_2 and Ito2I
140	073650.091.23	1.0	Report MTN, EMC test report for DCU32 / BRC32
139	P24-0062	2024-06-17	Report: EKTOS, IEC 60945 test report for DP270S
138	P24-0058	2024-06-14	Report: EKTOS, IEC 60945 test report for DP238S
136	REP037154	2024-09-04	Report: Nemko, Display Performance test report for ISIC DuraPANEL 27 S (Sperry Part No. 67027AB)
135	R200520-07906-000-A-4_	2021-01-06	Report: ISIC, IEC 61162-1/-2 test report for NMEA Module 07906-000 Rev.A
134	P24-0117-2	2024-11-04	Report: EKSTOS, IEC 60945 test report for DM270SL
133	REP063829	2024-11-22	Report: Nemko, Display Performance test report for ISIC DuraMON 27 SL
127	TR-V4.1.0-VMNet-149	Issue 1	Report: NGSM, VM Net Release 4.1.0, IEC 62288:2021 test report for CID
118	67000011V1	7	Manual: NGSM, VM Net Ships Manual- Vol 1
117	67000012	6	Manual: NGSM, VM Net ECDIS User Guide for Software version 4.1
116	67000011V2	7	Manual: NGSM, VM Net Ships Manual- Vol 2
114	TR-V4.0.0-VMNet-131	Issue 1	Report: NGSM, CID and CAM-HMI comparison to VM Net v3.0.0 for VisionMaster Net 4.0.0
109	P22-0126	1	Report: EKTOS, EMC and environmental test report for PCM4-Q170
102	TR-V3.0.0-VMNet-108	2	Report: NGSM, CID and CAM-HMI comparison to VMFT for VisionMaster NET Release 3.0.0
101	TR-V3.0.0-VMNet-101	1	Report: NGSM, System Performance Test Report for VisionMaster NET Display Software Release V3.0.0
82	5P03620	1	Report: SP, EMC and environmental test report for DuraPanel 24 Glass and DuraPanel 26 Glass
81	P19-0152-1	2019-09-03	Report: EKTOS, EMC and environmental test report for Slim line 25,5" Panel PC
72	362879	2018-11-06	Report: Nemko, Display performance tests for Visionmaster Net 26" Panel PC
71	8P06394 CSD	2018-08-27	Report: RISE, Compass Safe Distance test of Panel PC
70	P18-0055-1	2018-12-04	Report: EKTOS, EMC and environmental test report for VisionMaster Net 26" Panel PC
58	103230862LHD-001 Climatic and Vibration	1	Report: Intertek, Environmental test report of VisionMaster 340 Pedestal Console (65926P)
57	103230862LHD-001	4	Report: Intertek, EMC test report of VisionMaster 340 Pedestal Console (65926P)
40	NML61162RPT	1	Report: NGSM, Test report for IEC 61162 Interface Tests
31		1	Report: NGSM, Conning Information Display Test Report

## Marking of product

The Manufacturer and Type Designation to be applied to the equipment in a clearly visible location. In addition the equipment shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.



Job ID: **262.1-021346-17**  
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### **Periodical assessment**

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

The scope of the periodical/renewal assessment is to verify that the production quality conditions stipulated for the type approval are complied with and that no alterations are made to the product design or its components and/or materials without appraisal by the Society.

This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

### **Manufactured by**

**Sperry Marine B.V. -UK Branch:** Burlington House, 118 Burlington Road, New Malden, Surrey KT3 4NR,  
United Kingdom