

TYPE APPROVAL CERTIFICATE

This is to certify:

That the **460 Network Components**

with type designation(s)
Secure Maritime Gateway

Issued to

Northrop Grumman Sperry Marine B.V. - UK Branch
New Malden, Surrey, United Kingdom

is found to comply with

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
IEC 61162-460 Ed. 2.0 (2018-05) Maritime Navigation and radiocommunication equipment and systems – Digital interfaces – Part 460: Multiple talkers and multiple listeners – Ethernet interconnection – Safety and security

Application :

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Issued at **Høvik** on **2022-06-28**

This Certificate is valid until **2027-06-27** .

for **DNV**

DNV local unit: **UK & Ireland CMC & VMC**

Approval Engineer: **Steinar Kristensen**

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Marta Alonso Pontes
Head of Section

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 300,000 USD.



Product description

The Secure Maritime Gateway provides a means to transfer data securely between the navigation equipment connected to the bridge navigation network and equipment connected to the bridge administration network. The Secure Maritime Gateway includes a DMZ with a shared network drive for secure transfer of files between the networks.

Secure Maritime Gateway consists of the following:

Unit	Type Number	SW	Comment
Secure Maritime Gateway	68001AA	2.1.x	Power: 100-230VAC~ 50/60Hz Interfaces: 3 pcs 10/100/1000Base-T LAN (RJ45)

Application/Limitation

The Secure Maritime Gateway:

- may be provided with the following application services located within the DMZ:
 - Shared network drive for secure transfer of files between the secure and unsecure network using SMB or SFTP protocols
 - NAVTOR NavBox chart synchronisation software
 - SperrySphere Vessel Management software
- is to be in accordance with Maritime Gateway Installation and Commissioning Guide.
- complies with the requirements of IEC 60945 (2002) for protected equipment.
- complies with the requirements for Other Network Function (ONF) as specified in IEC 61162-450 (2018)

Type Approval documentation

DNV No	Drawing No	Rev.	Title
12	TR-SMG-DNV-092	2	Report: NGSM, Secure Maritime Gateway IEC 61162-460 Test Report and Compliance Matrix
8	68001010	2	Manual: NGSM, Maritime Gateway- Installation and Commissioning Guide
3	TAA00002ZD	2021-05-26	Certificate: DNV, Type approval certificate for HP EliteDesk 800 G6 SFF and TWR

Tests carried out

- Environmental testing: IEC 60945 (2002) incl Corr.1 (2008)
- Security testing: IEC 61162-460 (2018) for 460-Gateway

Marking of product

The type designation and name and contact address of the manufacturer shall be affixed visibly, legibly and indelibly to the product. In addition the product shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.

Periodical assessment

Periodical assessment is to be performed after 2 years and after 3.5 years. Additionally, a renewal assessment is to 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>