

TYPE APPROVAL CERTIFICATE

This is to certify:

That the 460 Network Components

with type designation(s)
460-Gateway

Issued to

Wärtsilä Voyage Limited
Dublin , Ireland

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
DNV GL rules for classification – Ships

Application :

See page 2.

Issued at **Høvik** on **2020-02-27**

for **DNV GL**

This Certificate is valid until **2025-02-26** .

DNV GL local unit: **Sweden CMC**

Approval Engineer: **Roger Lauritsen**

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.



Product description

The 460-Gateway consist of the following components:

- Cyber Security Router CSR460
- Application server (EMS-SKLU-Marine)

Software

Description	Version
SWD00000321, CSR460 Firmware	V 3.2.xxx
SWD00000323, CSR460 Dev App	v 3.2.xxx
SWD00000325, CSR460 VPN App	v 3.2.xxx
SWD00000324, CSR460 SNMP App	v 3.2.xxx
SWD00000322, CSR460 Profile	v 1.0.xxx
SWC00000111, Application Server OS Disk Image	v 1.0.xxx

Application/Limitation

- Installation is to be in accordance to CSR460 Router Security Guidelines and 460-Gateway Installation Guide.
- 460-Gateway is accepted for installation on all DNV GL main class vessels and for use in navigation network on DNV GL classed vessels with any variant of class notation Cyber Secure.
- Components listed in product description fulfills the requirements of IEC 60945 (2002) for protected equipment.
- Compliance to any regulatory requirements for radio equipment is not part of the scope of this type approval. If wireless interface is enabled this interface will be subject for separate approval.

Approval conditions

This type approval certifies that components listed in "Product description" have security capabilities in accordance with DNVGL-RU-SHIP Pt. 6 Ch. 5 Sec. 21.

At renewal of this type approval certificate, any modified requirements in the current edition of the DNVGL-RU-SHIPS shall be addressed (i.e. document assessment and type testing).

The type approved security capabilities are implemented in Operating system software and/or in Application software. Correct configuration for each delivered component shall be performed and verified before the product is used onboard.

Version and revision of Application software is reflected on the format x.y.z. which denotes changes in category "major.mid.minor". Any changes resulting in modified Operating system software or "major/mid" modification of Application software shall be informed to DNV GL by forwarding a description of the modification(s) including the corresponding new version/revision identifier. In such case, witnessing of testing may be required and the certificate shall be renewed to identify the new software version/revision.

Application software control

All changes to delivered components are to be managed and recorded as long as the system is in use on board.

Job Id: **262.1-032121-1**
Certificate No: **TAA00002KB**

Type Approval documentation

DNV GL No	Drawing No	Rev.	Title
12			Doc: CSR460 Router Security Guidelines
23		January 2020	Manual: 460-Gateway Installation Guide
9	Report ? 01/16	1	Report, TAT, Environmental tests, R3000-Q4LB
26	DANAK 19/16887		Report: DELTA, T600370 , EMC test of R3000-Q4LB Router
18	119-24874-2		Report: Force, Supplementary marine type testing of compact industrial PC (EMS-SKLU)
7	20160906571001	20.09.2016	Report: GRGTest, ESD Test, Industrial Cellular Router R3000-Q4LB
22		12.12.2019	Report: Hardware verification CSR460 including application server
17	T190923-01-A0		Report: PTC, Environmental tests, Industrial Marine Computer EMS-SKLU
19	T190906D01-E		Report: SGS, CE EMC Test report for industrial computer (EMS-SKLU)
25	Report No 01/16		Report: TAV TL, Climatic tests, Winmate 28 PPC and R3000-Q4LB

Tests carried out

- Environmental testing: IEC 60945 (2002) incl Corr.1 (2008)
- Security testing: IEC 61162-460 (2018) for 460-Gateway and 460-Wireless gateway.
- Rules: DNVGL-RU-SHIP Pt. 6 Ch. 5 Sec. 21 (Ed. July 2019 amended Feb. 2020)

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.dnvgl.com>