

TYPE APPROVAL CERTIFICATE

This is to certify:

That the 460-Gateway for bridge communication networks

with type designation
GATE-1

Issued to

Furuno Finland Oy
Espoo, Finland

is found to comply with

DNV GL Rules for classification, DNV GL Statutory interpretations, IMO resolution A.694(17), MSC/Circ.891, MSC/Circ.1091 and MSC.1/Circ.1503.

Application :

The 460-gateway approved by this certificate is accepted for installation on all vessels classed by DNV GL.

Temperature	A
Humidity	A
Vibration	A
EMC	B
Enclosure	A

Issued at **Høvik** on **2018-06-08**

This Certificate is valid until **2023-06-07**.

DNV GL local station: **Helsinki**

for **DNV GL**

Approval Engineer: **Olaf Gundersrud**

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Jan Tore Grimsrud
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

Interfacing the ships communication system and ECDIS, the Gate-1 Gateway allows for transfer of ENC chart files, automatic PAYS reporting and information sharing with Sea Traffic Management ashore.

Ports: 2xRJ45 LAN ports (ShipNet)
1xRJ45 LAN port (ECDIS)
2xUSB ports (dongle & mass storage)
1xCOM port (serial for service)

Power supply unit: Mascot 2121

Application/Limitation

Gate-1 shall be installed in a secure location with restricted physical access.

Type Approval documentation

NPS No.	Drawing no.	Rev.	Title
18	VTT-S-01054-14		IEC61162-460 Gateway: vibration test
17	SGS 292536-1		Gate-1: CSD and power test report
15	nemko 246508		IEC60945
14	Technical Documentation of GATE-1_final.docx	1.10	GATE-1: Functional description
12			GATE-1: FMD Operator's manual
10	18 Jan 2018	B	Operator's manual: Sea Traffic management
7	Gate-1-2018-101		GATE-1: DNVGL type approval testing report
5	Y:\Type-Approvals-2018\Gate-1_460-Gateway\documents\Technica	1.10	Technical Documentation of GATE-1: functional description
2			GATE-1: Operators manual
1	nemko 172391		IEC60945: GATE-1 emission test

Tests carried out

IEC 60945 (2002)
IEC 61162-460 (2015)

Marking of product

The name and contact address of the manufacturer and type designation of the product shall be affixed 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 (*alt.: this may be stated in the operation/installation manual*).

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.



Job Id: **262.1-028033-1**
Certificate No: **TAA00001WB**

END OF CERTIFICATE