



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX DNV 21.0102X** Page 1 of 4 [Certificate history:](#)
Status: **Current** Issue No: 0
Date of Issue: 2022-04-29
Applicant: **Kongsberg Maritime AS**
Kirkegårdsveien 45
P.b. 483. NO-3601 Kongsberg
Norway
Equipment: **Built-in modules for communication system**
Optional accessory:
Type of Protection: **Ex ec**
Marking: **Ex ec IIC T4 Gc -20°C ≤ Ta ≤ +55°C**

Approved for issue on behalf of the IECEx
Certification Body:

Asle Kaastad

Position:

Certification Manager

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

DNV Product Assurance AS
Veritasveien 3
1363 Hovik .
Norway





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Manufacturer: **Kongsberg Maritime AS**
Kirkegårdsveien 45
P.b. 483. NO-3601 Kongsberg
Norway

Manufacturing locations: **Kongsberg Maritime AS**
Kirkegårdsveien 45
P.b. 483. NO-3601 Kongsberg
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This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-7:2017](#) Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[NO/DNV/ExTR22.0024/00](#)

Quality Assessment Report:

[NO/PRE/QAR15.0003/02](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Built-in modules for communication system

SPECIFIC CONDITIONS OF USE: YES as shown below:

- The modules must be built into a cabinet which complies with requirements of the standards EN 60079-0 & EN 60079-7.
- The modules must be used in an area of not more than pollution degree 2
- Interface to the EFl-16 in hazardous area zone 2 shall only be by the analogue output terminals AO1 (0-10V) or AO2 (+/-10V). The relay output terminals shall not be used.
- Connecting / disconnecting wires or cables and operating buttons / switches are not allowed when the module is energized unless area is known to be non-hazardous.
- All Network and Serial line cables connected to the RJ45 connectors on the RCU shall be cabinet internal. No direct field cables shall be used.
- All screw terminals are 2.5 mm² that must be fastened with a torque of 0.4-0.5 Nm.



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Equipment (continued):

The investigated modules are I/O module, termination unit or controller modules, intended for different application as parts of communication system/station. The built-in modules covered by this certificate are:

RDIO420S	Remote Digital Input Output	24Vdc, max 0.9A, power dissipation 10W
RMP420	Remote Multipurpose I/O	24Vdc, 10W, Loop current max 1A per channel
RMP422i	Remote Multipurpose I/O	24Vdc, 10W, Loop current max 1A per channel
RMP422Si	RMP422S (S version)	24Vdc, 10W, Loop current max 1A per channel
RCU502i	Remote Control Unit	24Vdc, 20W power dissipation
RHUB200-5	RBUS Hub	24Vdc, 100mA
BUS-TERM	BUS-Termination	24Vdc
RMC-TERM	Remote Media Converter Termination	24Vdc
RMC-ST	Remote Media Converter-ST	24Vdc, 80mA
EFI-16	Earth Fault Indicator	24Vdc, max 100mA

External cabinet is to be provided in the end application. Marking code with X-suffix indicates Specific condition of use. Ambient range is specified for.

Service temperature is determined to be $T_s = 70^\circ\text{C}$. At end-installation of the modules in a cabinet, no enclosure's part in normal operation, shall have temperature exceeding T_s . The max ambient 55°C is specified for the end-product which is built up by enclosure and the modules.