DNV·GL

Certificate No:
TAA00001TS

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Industrial Personal Computer

with type designation(s)
RXi-042 Industrial PC platform

Issued to
GE Intelligent Platforms GmbH
Augsburg, Germany

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.
The original certificate number: A-14197

Location classes:

Temperature	**D**
Humidity	**B**
Vibration	**A**
EMC	**B**
Enclosure	**Required protection according to DNV GL Rules shall be provided upon installation on board**

Issued at **Hamburg** on **2018-06-06**
This Certificate is valid until **2023-06-05**.
DNV GL local station: **Augsburg**

Approval Engineer: **Marco Rinkel**

for **DNV GL**

Joannis Papanuskas
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.

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Product description

Industrial PC:

RXi-042 SlimVersion (no slot) / RXI-XP (similar Marine Version for general market)
RXi-042 Standard Version (2 Slot) / RXI-XP (similar 2 Slot Marine Version for general market)
RXi-042 Premium Version (4 Slot) / RXI-XP (equivalent 4 Slot Marine Version for general market)

Slim Version: 04200ZD11202A / RXE0NMF0G102A

- No slots, no fan, flat, Intel i7 2.5Ghz 4GB DDR-RAM, vxWorks SW image on CFast, no SSD, 512Kbyte nvSRAM, 1x RS232, 1x RS422, 0-60 °C
- bCOM: bC6L14D6Z3ZHA
- carrier: CEC04-44U0A
- for RXE Version only: SSD insteed of CFAST

Slim Version: 04200WL11202A / RXE0NMN0G102A

- No slots, no fan, flat, Intel Celeron 2GB DDR-RAM, vxWorks SW image on CFast, no SSD, 512Kbyte nvSRAM,1x RS232, 1x RS422, 0-60 °C
- bCOM: bC6L14L5Z3ZHA
- carrier: CEC04-44U0A
- for RXE Version only: SSD instead of CFAST

Standard Version: 04220FL11232A / RXE2NMN0G132A

- 2 slots, no fan, flat, Intel Celeron 2GB DDR-RAM, vxWorks SW image on CFast, no SSD, 512Kbyte nvSRAM,1x RS232, 1x RS422, 0-60 °C
- bCOM: bC6L14L5Z3ZHA
- carrier: CEC04-44U0A
- riser card: 043-S2A
- for RXE Version only: SSD instead of CFAST

Premium Version: 04240FD11234A / RXE4NMF0G134A

- 4 slots, no fan, flat, Intel core i7, 4GB DDR-RAM, vxWorks SW image on CFast, no SSD, 512 kByte nvSRAM, 2x RS232, 2x RS422, 0-60 °C
- bCOM: bC6L14D6Z3ZHA
- carrier: CEC04-44U0A
- riser card: 043-S4A
- for RXE Version only: SSD instead of CFAST

Nominal voltage : 24V
Compass safe distance : 5 cm

Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV GL Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

Product certificate

If specified in the Rules, ref. Pt.4 Ch.9 Sec.1, the control and monitoring system in which the above listed hardware is used shall be delivered with a product certificate. For each such delivery the certification test is to be performed at the manufacturer of the application system before the system is shipped to the yard. The test shall be done according to an approved test program. After the certification the clause for application software control will be put into force.

Clause for application software control
All changes in software are to be recorded as long as the system is in use on board. The records of all changes are to be forwarded to DNV GL for evaluation and approval. Major changes in the software are to be approved before being installed in the computer.

Type Approval documentation
See ANNEX.

Tests carried out
Applicable tests according to class guideline DNVGL-CG-0339, November 2017.
The 'Compass safe distance' was measured according to section 11.2 of IEC 60945 4th edition (2002).

Marking of product
The products to be marked with model name, manufacturer name and serial number.

Periodical assessment
The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:
- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

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.

END OF CERTIFICATE

ANNEX
Type Approval documentation
(hidden)