



TYPE APPROVAL CERTIFICATE

Certificate No:
TAA00001HS
Revision No:
5

This is to certify:

That the Peripheral Equipment

with type designation(s)
RSTi EP I/O-System

Issued to

Intelligent Platforms, LLC
Charlottesville, VA, USA

is found to comply with

DNV 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.

Location classes:

Temperature	D
Humidity	B
Vibration	B
EMC	B
Enclosure	A

Issued at **Hamburg** on **2023-03-06**

for **DNV**

This Certificate is valid until **2023-05-10**.

DNV local unit: **Essen**

Approval Engineer: **Dariusz Lesniewski**

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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.

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.



Form code: TA 251

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Product description

The modular RSTi-EP remote I/O system supports common fieldbus systems and conforms to IEC 61131-2. Up to 64 active I/O modules can be combined in a RSTi-EP remote station.

The following components belong to the RSTi-EP product series:

- Fieldbus coupler (gateway)
- Active I/O modules
- Passive I/O modules
- Functional safety modules
- Mechanical fixing elements (end bracket, end plate)

Fieldbus coupler

Part name	Hardware version
EPXPNS001	01.05.xx
EPXPNS101	01.05.xx
EPXETC001	02.02.xx
EPXEIP001	02.01.xx
EPXMBE101	01.03.xx

AUX-Module

EP-711F	01.02.xx
EP-751F	01.02.xx
EP-700F	01.02.xx
EP-710F	01.02.xx
EP-750F	01.02.xx

Digital Input

EP-1214	01.10.xx
EP-12F4	01.01.xx
EP-1218	01.01.xx
EP-1318	01.31.xx
EP-125F	01.01.xx
EP-153F	01.01.xx

Digital Output

EP-2214	01.01.xx
EP-2614	01.11.xx
EP-2218	01.01.xx
EP-225F	01.03.xx
EP-2634	01.02.xx
EP-291F	01.00.xx

230V

EP-2814	01.10.xx
EP-2714	01.03.xx
EP-1804	01.10.xx
EP-1813	01.40.xx

Analog Input

EP-3124	01.20.xx
EP-3164	01.20.xx
EP-3264	01.20.xx
EP-3664	01.20.xx
EP-3704	01.02.xx
EP-3804	01.02.xx

Analog Output

EP-4164	01.00.xx
EP-4264	01.00.xx

Power-Feed

EP-7631	01.01.xx
EP-7641	01.01.xx

Counter

EP-5212	00.91.xx
EP-5112	00.90.xx
EP-5111	00.91.xx

Special functions

EP-5311	01.00.xx
EP-8310	01.00.xx

Flammability rating UL94: V0

Type of connection: Push In

Application/Limitation

Corrosion test (salt mist) was not carried out. Compliance with the IEC 60945 in this regard to be considered case-by-case.

EMC in the range 2 GHz to 6 GHz according to DNV-CG-0339, August 2021 has not been verified. EMC up to 6 GHz must additionally be documented for installation on ships contracted for construction on or after 2022-01-01.

Approval Conditions

The Type Approval covers hardware listed under Product description.

When the hardware is used in applications to be classed by DNV, 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 RU SHIP Pt.4 Ch.9 Sec. 1.

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 for evaluation and approval. Major changes in the software are to be approved before being installed in the computer.

Type Approval documentation

Documents package as the Job Id. 262.1-021947-7

Products data sheet: 10.19 GFA-2103

Tests carried out

Applicable tests according to Class Guideline DNVGL-CG-0339, Edition November 2016.

Applicable tests for protected equipment according to IEC 60945, 4th edition (2002).

(Application/Limitation to be observed)

Marking of product

The products to be marked with:

- manufacturer name
- part name / part no.
- serial no.
- hardware version

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 at renewal of this certificate.

END OF CERTIFICATE