

Certificate No: **TAA00001HS** Revision No:

# TYPE APPROVAL CERTIFICATE

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 GL rules for classification – Ships, offshore units, and high speed and light craft

DIV GL rules	or classification – Ships, offshor	e units, and night speed and light craft
<b>Application</b>	:	
Product(s) apply DNV GL.	proved by this certificate is/are	accepted for installation on all vessels classed
Location class	es:	
Temperature Humidity Vibration EMC Enclosure	D B B B	
Issued at <b>Hamb</b>	ourg on <b>2019-04-01</b>	for <b>DNV GL</b>
	is valid until <b>2022-11-21</b> . ation: <b>Magdeburg</b>	.s. <b>5.117 G2</b>
Approval Engine	eer: <b>Dariusz Lesniewski</b>	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.



Form code: TA 251 Revision: 2016-12 www.dnvgl.com Page 1 of

Job Id: **262.1-021947-5** Certificate No: **TAA00001HS** 

Revision No: 1

# **Product description**

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

The following components belong to the u-remote product series:

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

Fieldbus coupler

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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

# 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

# 230V

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

Form code: TA 251 Revision: 2016-12 www.dnvgl.com Page 2 of 4

Job Id: **262.1-021947-5** Certificate No: **TAA00001HS** 

Revision No: 1

EP-3804	01.02.xx
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# **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

# **Approval conditions**

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 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. 262.1-021947-1 Product Data Sheet (GFA 08.16 2103)

#### **Tests carried out**

Applicable tests according to Class Guideline DNVGL-CG-0339, Edition November 2015.

# Marking of product

The products to be marked with:

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

Form code: TA 251 Revision: 2016-12 www.dnvgl.com Page 3 of 4

Job Id: **262.1-021947-5** Certificate No: **TAA00001HS** 

Revision No: 1

# **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 least every second year and at renewal of this certificate.

END OF CERTIFICATE

Form code: TA 251 Revision: 2016-12 www.dnvgl.com Page 4 of 4