

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Peripheral Equipment**

with type designation(s)

Serial to Ethernet Device Server Series NPort IA, NPort 5200, NPort 5400 and MGate MB

Issued to

Moxa Inc.**New Taipei City, Taiwan**

is found to comply with

DNV GL rules for classification – Ships and offshore units**Application :****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.****Location classes:**

Temperature	D
Humidity	B
Vibration	A
EMC	B
Enclosure	Required protection according to the Rules to be provided upon installation on board.

This Certificate is valid until **2017-12-31**.Issued at **Høvik** on **2015-11-11**DNV GL local station: **Kaohsiung**Approval Engineer: **Andrzej Gdaniec**for **DNV GL**

Odd Magne Nesvåg
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

Moxa Inc. Serial to Ethernet Device Server Series NPort IA, NPort 5200, NPort 5400 and MGate as specified in the table below:

	Model No.	MGate Model No.
NPort IA Series	5150	MB3170
	5150I	MB3170I
	5150-M-SC	MB3170-M-SC, MB3170-M-ST, MB3170-M-ST-T
	5150I-M-SC	MB3170I-M-SC, MB3170I-M-ST, MB3170I-M-ST-T
	5150-S-SC	MB3170-S-SC, MB3170-S-ST, MB3170-S-ST-T
	5150I-S-SC	MB3170I-S-SC, MB3170I-S-ST, MB3170I-S-ST-T
	5250	MB3270
	5250I	MB3270I
	5150-T	MB3170-T
	5150I-T	MB3170I-T
	5150-M-SC-T	MB3170-M-SC-T
	5150I-M-SC-T	MB3170I-M-SC-T
	5150-S-SC-T	MB3170-S-SC-T
	5150I-S-SC-T	MB3170I-S-SC-T
	5250-T	MB3270-T
	5250I-T	MB3270I-T
NPort 5200 Series	5230	
	5232	
	5232I	
	5230-T	
	5232-T	
	5232I-T	
NPort 5400 Series	5410	
	5430	
	5430I	
	5450	
	5450I	

Place of manufacture

Moxa Inc.
Fl.4, No.135, Lane 235, Pao-Chiao Rd.,
Shing Tien City, Taipei, Taiwan, R.O.C.

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 classification of ships Pt.4 Ch.9 Control and monitoring systems.

Type Approval documentation

Tests carried out

Applicable tests according to DNV Standard for Certification No. 2.4, April 2006.

For the bridge mounted components the 'Acoustic noise and signals' and the 'Compass safe distance' were measured according to sections 11.1 and 11.2 of IEC 60945, 4th edition (2002) including Corrigendum 1 (2008).

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