



Certificate no.:
TAA00003SX

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Network and Communication Components

with type designation(s)

EDS-4008, EDS-G4008, EDS-4009, EDS-4012, EDS-G4012, EDS-4014, EDS-G4014

issued to

Moxa Inc.

Taoyuan City, Taiwan Region

is found to comply with

DNV rules for classification – Ships Pt.6 Ch.5 Sec.21 Cyber security

Application:

This type approval covers security capabilities in accordance with DNV security profile 2, IACS UR E27 Rev.1 (Sep 2023) and IEC 61162-460 Edition 3.0 (Apr 2024), subject to conditions stated in this certificate.

Issued at **Høvik** on **2025-12-12**

This Certificate is valid until **2027-12-11**.

DNV local unit: **Kaohsiung**

for **DNV**

Approval Engineer: **Pål Børre Kristoffersen**

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 USD 300 000.

Product description

The EDS-4008 Series is a range of 8-port managed Fast Ethernet switches with the option for four 1 Gbps uplink ports or two 100M ST/SC fiber-optic ports.

The EDS-G4008 Series is equipped with 8 Gigabit Ethernet ports, making it ideal for upgrading an existing network to Gigabit speed or building a new full Gigabit backbone.

The EDS-4009 Series is a range of 9-port managed Fast Ethernet switches with the option for three 100M ST/SC fiber-optic ports.

The EDS-4012 Series is a range of 12-port managed Fast Ethernet switches with the option for four 1 Gbps fiber-optic uplink ports.

The EDS-G4012 Series is equipped with 12 Gigabit Ethernet ports and up to four 1 Gbps or 2.5 Gbps fiber-optic ports, making it ideal for upgrading an existing network to Gigabit speed or building a new full Gigabit backbone.

The EDS-4014 Series is a range of 14-port managed Fast Ethernet switches with four 1 Gbps and two 2.5 Gbps fiber-optic ports.

The EDS-G4014 Series is equipped with eight Gigabit Ethernet ports and six 2.5 Gbps fiber-optic ports, making it ideal for upgrading an existing network to Gigabit speed or building a new full Gigabit backbone.

The hardware version of EDR-4000 series is v1.0.

The software version tested is v4.2.2 for all devices. The certificate covers software version 4.y.z according to Moxa change control process.

Application/Limitation

This type approval covers cyber security capabilities at security profile 2 for the systems listed in Product description.

This type approval covers cyber security capabilities according to IEC 61162-460 for the systems listed in Product description. When the systems are configured as 460-switch, the following limitations apply:

- IGMPv3 is supported without Source IP Filtering capability.
- VLAN rate limiting is supported if the VLANs are assigned to different ports.

The type approved product do not include functionality for direct remote access from an untrusted network to the product. Such functionality may be implemented as a jump-host in a DMZ, but this is not part of type approved system.

The type approved products shall be installed in restricted areas. Access to the components shall be restricted and controlled.

If the type approved product is used in applications subject to cyber security requirements by DNV rules for classification, correct configuration shall be verified by DNV.

Major changes affecting the type approved security capabilities shall be informed to DNV. Such modifications may require witnessing of type testing and update of this type approval certificate to reflect new products or versions listed in Product description.

Type Approval documentation

I020 – Control system functional description:

DNV_SP2_compliance_table v2.0

IEC61162_460_compliance_table v2.0

Z252 – Test procedure at manufacturer:

E27 Test Procedure 12/6/2025

IEC61162-460 Test Procedure 13/6/2025

F141 - Guidelines for hardening and configuration of security capabilities

G4000 Security hardening guide v2.0

F071 - Inventory list

Inventory list 18/9/2025

F030 - System topology

Topology 18/9/2025

F259 - Description of secure development lifecycle processes
EDS_G4000_SDL_compliance_table 17/07/2025

I320 – Software change handling procedure:
Software change handling procedure Rev A

Tests carried out

Applicable tests according to DNV-RU-SHIP Pt.6 Ch.5 Sec.21 edition July 2024, security profile 2 and IEC 61162-460 Edition 3.0 (Apr 2024).

Relevant manuals and instructions of Moxa's management system have been verified for compliance with IACS UR E27 chapter 5.

Marking of product

The products to be marked with:

- manufacturer name
- model name
- serial number
- power supply ratings.

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
- Review documented evidence of adherence to Secure Development Lifecycle processes.

A renewal assessment will be performed at renewal of the certificate.

Manufactured by:

Moxa Inc. Taoyuan City, Taiwan Region