

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Network and Communication Components**

with type designation(s)

SL or SLX -2, -5, -6, -8 or -9; ES, RS, MS, RG or MG-1 to 9; SC, ST, M or S; L

Issued to

**Autic System AS
TØNSBERG, Norway**

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.****Location classes:**

Temperature	D
Humidity	B
Vibration	A
EMC	A
Enclosure	Required protection according to relevant rules shall be provided upon installation on board

Issued at **Høvik** on **2018-11-15**for **DNV GL**This Certificate is valid until **2023-12-31**.DNV GL local station: **Sandefjord**Approval Engineer: **Ståle Sneen****Jan Tore Grimsrud
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.



Job Id: **262.1-010776-7**
Certificate No: **TAA0000238**

Product description

SL/SLX-5/8/9ES-1/2/3	5 and 8/9 port industrial Ethernet switches
SL/SLX-6ES-4/5	6 port industrial Ethernet switch featuring 2 fast fiber optic ports
SL/SLX-6RS-1/4/5	6 port industrial Ethernet Ring switch featuring Sixnet's Real-Time-Ring
SL/SLX-5/8MS-1/4/5	5 and 8 port industrial Ethernet managed switches
SLX-8ES-6/7	8 port industrial Ethernet unmanaged switch featuring 3 noise-immune fiber optic ports
SLX-8MG-1	8 port "all-Gigabit" industrial Ethernet managed switch
SLX-8MS-8/9	8 port industrial Ethernet managed switch featuring 4 noise-immune fiber optic ports

DC power input voltage: 10 - 30 VDC/330 mA

Place of manufacture

TAILYN TECHNOLOGIES INC
10 RONG-AN RD, LU-CHU DISTRICT,
TAOYUAN CITY, 338 TAIWAN

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

Application/Limitation

Ex-certification is not covered by this certificate. Application in hazardous area to be approved in each case according to the Rules and Ex-Certification/ Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body.

Type Approval documentation

Test reports:

- GME Environmental Test Report for SL-8MS-4ST, doc. no.: GM28043E dated 2008-08-11
- Maritime EMC Test Report for SL-8MS-4ST, doc. no.: GM28063cr1 dated 2009-06-15
- GME Electrical Test Report for SL-8MS-4ST, doc. no.: GM28042x dated 2008-09-16
- Dayton T.Brown Vibration Test report for SL-8MS-4ST, doc. no.: DTB04R08-0785 dated 2008-07-18

Datasheets:

L/SLX-5/8/9ES-1/2/3 rev. 2009-06-05, SL/SLX-6ES-4/5 rev. 2009-07-09, SL/SLX-6RS-1/4/5 rev. 2009 07 02, SL/SLX-5/8MS-1/4/5 rev. 2009-08-27, SLX-8ES-6/7 rev. 2009-06-12, SLX-8MG-1 rev. 2009 08 27, SLX-8MS-8/9 rev. 2009-08-27

Type approval renewal assessment report for A-14051, DNV GL Kaohsiung 2018-10-31.

Type approval renewal assessment report for A-14051, DNV GL Sandefjord 2018-11-15.

Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, November 2016.

Marking of product

Manufacturer: SIXNET, LLC
Model name: As listed under Product description
Serial number: Unique for each delivered item

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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