Certificate No: LR2696023TA
Issue Date: 10/12/2025
Expiry Date: 09/12/2030

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	**VOLKTEK CORPORATION**
Address	4F, No.192, Liancheng Rd., Zhonghe Dist., New Taipei City, 23553, Taiwan
Place of Production	VOLKTEK CORPORATION (Factory) No.17-1, Guotai Rd, Zhunan, Miaoli, 350, Taiwan
Type	Managed Ethernet Switches
Description	SEN-9648P, INS-840GM INS-8408AM and IEN-9648M Series Industrial Ethernet Switches
Trade Name	SEN-9648P, INS-840GM INS-8408AM and IEN-9648M Series
Application	Marine application for use in environmental category ENV1, ENV2, and ENV3 for equipment in general power distribution zones, as defined in LR Type Approval Test Specification No. 1, July 2024.
Specified Standard	Manufacture's product specification
Ratings	SEN-9648Pseries SEN-9648PM-24V, SEN-9608PM-24V, SEN-9648PM, SEN-9608PM 24V DC primary and secondary supply 48V DC primary and secondary supply Input DC 24V/48V, Temp: -40~75℃

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Meghraj Mahar

Specialist Electrical & Control to Lloyd's Register Marine and Offshore India LLP
A member of the Lloyd's Register group

Units 1702-1704, 17th Floor (Level-13), Building Q2, Aurum Q Parc; Gen 4/1 TTC, Thane-Belapur Road, Ghansoli, Navi Mumbai, 400710, India

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Type Approval Certificate

INS-840GMseries
INS-840GM, INS-840G
12V DC primary and secondary supply
24V DC primary and secondary supply
48V DC primary and secondary supply
Input DC 12V/24V/48V, Temp: -40~70℃

INS-8408AMseries
INS-8408AM, INS-8408A
12V DC primary and secondary supply
24V DC primary and secondary supply
48V DC primary and secondary supply
Input DC 12V/24V/48V, Temp: -40~70℃

IEN-9648Mseries
IEN-9648M, IEN-9608M
12V DC primary and secondary supply
24V DC primary and secondary supply
48V DC primary and secondary supply
Input DC 24V/48V, Temp: -40~75℃

Other Conditions

1. Installation of this equipment for marine applications is to be in accordance with current Lloyd's Register Rules and Regulations.
2. Examination of software aspects is restricted to functional operation as demonstrated in the Performance test.
3. If the specified standards are amended during the validity of this certificate, the product is to be re- approved prior to it being supplied to vessels to which the amended standards apply.
4. Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

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Type Approval Certificate

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register Marine and Offshore India LLP of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: LR2103426TA-02

The Design Appraisal Document TSO-25-047781-E-01 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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