



Certificate number: 82485/A0 BV

File number: TCF09_249

Product code: 4603H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

www.veristar.com

TYPE APPROVAL CERTIFICATE

This certificate is issued to

Danelec

Farum - DENMARK

for the type of product

CYBER MONITORING SYSTEM

Danelec Onboard Insights

Requirements:

NR659 Bureau Veritas Rules on Cyber Security or the Classification of marine units
IACS UR E27 Rev.1 Sep 2023 Cyber resilience of on-board systems and equipment

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 25 Feb 2031

For Bureau Veritas Marine & Offshore,

At BV FREDERICIA, on 25 Feb 2026,

Jesper JENSEN

This certificate was created electronically and is valid without signature



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: <https://www.veristarm.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=iyp6v90wxc>

BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

Danelec Onboard Insights is a ship performance monitoring system allowing to collect, process and visualize data from engine, hull and propeller sensors.

2. DOCUMENTS AND DRAWINGS :

Name	Revision Number / Date
F030 - System topology	V 1.3
F141 - Guidelines for hardening and configuration of security capabilities	V 1.1
F021 - Description of security capabilities	V 1.1
Secure development lifecycle, modification strategy and change management	V 1.2
F071 - Asset Inventory	V 1.1
F252 - Procedure for test of security capabilities	V 1.4

No departure from the above documents shall be made without the prior consent of the Society. The manufacturer must inform the Society of any modification or changes to these documents and drawings.

3. TEST REPORTS :

Test reports "Test report for Danelec Onboard Insights as IACS UR E27 equipment_signed" dated 16/10/2025 were reviewed and approved for this certificate.

The following items were investigated:

1. Protect against casual or coincidental access by unauthenticated entities
 - IEC 62443-3-3/SR 1.1 : Human user identification and authentication
 - IEC 62443-3-3/SR 1.3 : Account management
 - IEC 62443-3-3/SR 1.4 : Identifier management
 - IEC 62443-3-3/SR 1.5 : Authenticator management
 - IEC 62443-3-3/SR 1.6 : Wireless access management
 - IEC 62443-3-3/SR 1.7 : Strength of password-based authentication
2. Protect against casual or coincidental misuse
 - IEC 62443-3-3/SR 2.1 : Authorization enforcement
 - IEC 62443-3-3/SR 2.2 : Wireless use control
 - IEC 62443-3-3/SR 2.3 : Use control for portable and mobile devices
 - IEC 62443-3-3/SR 2.4 : Mobile code
 - IEC 62443-3-3/SR 2.5 : Session lock
 - IEC 62443-3-3/SR 2.8 : Auditable events
 - IEC 62443-3-3/SR 2.9 : Audit storage capacity
 - IEC 62443-3-3/SR 2.10 : Response to audit processing failures
 - IEC 62443-3-3/SR 2.11 : Timestamps
3. Protect the integrity of the CBS against casual or coincidental manipulation
 - IEC 62443-3-3/SR 3.1 : Communication integrity
 - IEC 62443-3-3/SR 3.2 : Malicious code protection
 - IEC 62443-3-3/SR 3.3 : Security functionality verification
 - IEC 62443-3-3/SR 3.5 : Input validation
 - IEC 62443-3-3/SR 3.6 : Deterministic output
4. Prevent the unauthorized disclosure of information via eavesdropping or casual exposure
 - IEC 62443-3-3/SR 4.1 : Information confidentiality
 - IEC 62443-3-3/SR 4.3 : Use of cryptography
5. Monitor the operation of the CBS and respond to incidents
 - IEC 62443-3-3/SR 6.1 : Audit log accessibility

6. Ensure that the control system operates reliably under normal production conditions

- IEC 62443-3-3/SR 7.1 : Denial of service protection
- IEC 62443-3-3/SR 7.2 : Resource management
- IEC 62443-3-3/SR 7.3 : System backup
- IEC 62443-3-3/SR 7.4 : System recovery and reconstitution
- IEC 62443-3-3/SR 7.5 : Alternative power source
- IEC 62443-3-3/SR 7.6 : Network and security configuration settings
- IEC 62443-3-3/SR 7.7 : Least Functionality

4. APPLICATION / LIMITATION :

4.1 - IACS UR E27 Rev.1 Sep 2023 Cyber resilience of on-board systems and equipment .

NR659 Bureau Veritas Rules on cyber security for the classification of marine units.

4.2 - This certificate does not include the components. If required by Bureau Veritas Rules, the components are to be type approved or design appraised. (e.g switches)

4.3 - Only Hardware and Firmware / Software version 2.XX since 2.25 successfully tested together in compliance with the rules as referred to in page one, according to the declaration of the manufacturer are covered by this certificate.

4.4 - The installation shall comply with the Manufacturer's recommendation described in the above-referenced documentation.

4.5 - It is manufacturer's responsibility to inform the Society of any modification or changes which could impact the validity of this certificate.

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - This system is to be supplied by **DANELEC** in compliance with the type described in this certificate.

5.2 - This system product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.

5.3 -**DANELEC** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

5.4 - For information **DANELEC** has declared to Bureau Veritas the following production site(s):

**GPV ASIA (THAILAND) Co. LTD.
834 MOON 4, BANGPOO INDUSTRIAL ESTATE SOI 11-12
SUKHIMVIT ROAD, PRAKSA
MUANG DISTRICT
10280 SAMUTPRAKARN
THAILAND**

6. MARKING OF PRODUCT :

N/A

7. OTHERS :

7.1 - It is **DANELEC** responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

*** END OF CERTIFICATE ***