



Certificate No:
TAA000030Z

TYPE APPROVAL CERTIFICATE

This is to certify:

That the **Peripheral Equipment**

with type designation(s)
DuraMON 10.1 S, DuraMON 15.6 S

Issued to

ISIC A/S
Brabrand, Midtjylland, Denmark

is found to comply with

DNV GL rules for classification – Ships, offshore units, and high speed and light craft
IEC 60945 Ed. 4 (2002-08) Maritime navigation and radiocommunication equipment and systems – General requirements – Methods of testing and required test results

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Location classes:

Temperature	B (tested down to -15°C)
Humidity	B
Vibration	A
EMC	B
Enclosure	A / IP20 (standalone), B / IP65 (when sealed to console)

Issued at **Høvik** on **2021-07-01**

This Certificate is valid until **2026-06-30**.

for **DNV**

DNV local station: **Denmark CMC**

Approval Engineer: **Ståle Sneen**

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Marta Alonso Pontes
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.

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 300,000 USD.



Form code: TA 251

Revision: 2021-03

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Product description

ISIC DuraMON 10-27 S-Line Series, comprising the following models:

Model name	Part No.	Description
DuraMON 10.1 S	09310-xxx	10.1" Wide Screen LCD (TFT, 1280 x 800, 16:10) with P-cap multi touch
DuraMON 15.6 S	09315-xxx	15.6" Wide Screen LCD (TFT, 1920 x 1080, 16:9) with P-cap multi touch
External Power Supply	09251-xxx	24 VDC Marine Isolated Power Supply (Input 100-240 VAC)

xxx designates OEM variants of the products.

Compass safe distance measurements:

DuraMON 10.1 S: Standard 95 cm. Steering 60 cm.

DuraMON 15.6 S: Standard 110 cm. Steering 70 cm.

External Power Supply: Standard 35 cm. Steering 25 cm.

Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, 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.

Place of manufacture

ISIC A/S
Edwin Rahrs Vej 54
DK-8220 Brabrand

Type Approval documentation

Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, December 2019.

Applicable tests according to IACS Unified Requirements E10 rev. 7 and rev. 8.

Applicable tests for protected equipment according to IEC 60945:2002.

Shock test: 20 5g/11ms half-sine shocks in 6 directions according to IEC 60068-2-27:2008.

Marking of product

Manufacturer's name: ISIC

Type No.: Model name as listed under product description

Unique serial No.: YYWWxxxx

Year of manufacture: YYYY

(Additionally to the year of manufacture, year and week of production is included in the serial No.)

Power supply ratings: Mains voltage as listed under product description + Mains current

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