



Certificate no.:  
**TAA00003CT**

# TYPE APPROVAL CERTIFICATE

## This is to certify:

that the **Peripheral Equipment**

with type designation(s)  
**DM215S, DM238S, DM 31.5 S / DuraMON 31.5 S**

issued to

**ISIC A/S**  
**Brabrand, Midtjylland, Denmark**

is found to comply with

**DNV 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:

<b>Temperature</b>	<b>B (-15°C to 70°C)</b>
<b>Humidity</b>	<b>B</b>
<b>Vibration</b>	<b>A</b>
<b>EMC</b>	<b>B</b>
<b>Enclosure</b>	<b>A / IP22 (Standalone)</b> <b>C / IP56 (When sealed to console)</b>

Issued at **Høvik** on **2024-01-10**

for **DNV**

This Certificate is valid until **2029-01-09**.

DNV local unit: **Denmark CMC**

Approval Engineer: **Martin Skårerverket**

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: 2023-09

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## Product description

ISIC DuraMON S series, comprising the following models:

Product Type	Product Name	ISIC P/N*	Description
DM215S	DuraMON 22 S	09322-xxx	21.5" 16:9 FHD Marine Monitor w/glass front w.touch
DM238S	DuraMON 24 S	09324-xxx	23.8" 16:9 FHD Marine Monitor w/glass front w.touch
DM 31.5 S (DuraMON 31.5 S)	DuraMON 32 S	09332-xxx	31.5" 16:9 UHD Marine Monitor w/glass front w.touch

\* xxx designates OEM variants of the products.

Technical information:

Product Type	DM215S	DM238S	DM 31.5 S
Approved for nominal AC supply voltage	100-240 VAC 50/60 Hz		
Approved for nominal DC supply voltage	24 VDC		N/A
Video inputs	2 x DisplayPort 1.2		2 x DisplayPort 1.2a 2 x HDMI 1.4
VESA mount	280 x 150 mm		400 x 200 mm
Input Device	PCAP multi touch		

Compass safe distance measurements:

DM215S: Standard 185 cm Steering 120 cm  
 DM238S: Standard 205 cm Steering 140 cm  
 DM 31.5 S: Standard 180 cm Steering 115 cm

Overview of tested hardware/firmware including name and versions are listed in ISIC's statement "ISIC statement no. 2023-10-03 Rev. A".

## 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 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

Test Reports:	Number	Rev. / Date
Report IP 56 test	5F007245	- / 2015-07-31
DM 31.5 S TA Test Report	P21-0073	- / 2021-08-20
DM 31.5 S TA Test Report (additional)	P22-0189	- / 2023-02-07
DM215S/DM238S TA Test Report	P23-0114	1 / 2023-10-05
Technical documentation / Datasheets:		
User Manual, DuraMON 10-24 S-Line	09330-000	B / 2023-09
DM 31.5 S 2D Outline	09333-000	A / 2022-08-30
DM 31.5 S Datasheet	09410-000	- / 2022-10-04
User Manual, DuraMON 32-55 S-Line	09995-000	A / 2023-04
DM215S Datasheet	10066-000	- / 2023-10-11
DM238S Datasheet	10067-000	- / 2023-10-12
DM215S 2D Outline drawing	11003-000	A / 2022-12-15
DM238S 2D Outline drawing	11004-000	A / 2022-12-15
ISIC statement no. 2023-10-03	2023-10-03	A / 2023-10-03

### Tests carried out

Applicable tests according to class guideline DNV-CG-0339, August 2021.  
Applicable tests according to IACS Unified Requirements E10 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 + maximum supply load

### 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