

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Electronic chart display and information system (ECDIS)

with type designation(s)
ECDISPILOT & MULTIPILOT Platinum

Issued to

Wärtsilä SAM Electronics GmbH
Hamburg, Germany

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2019/1397**,
item No. MED/4.30. SOLAS 74 as amended, Regulations V/18, V/19 & X/3, IMO Res. A.694(17), IMO Res. MSC.36(63), IMO Res. MSC.97(73), IMO Res. MSC.191(79), IMO Res. MSC.232(82), IMO Res. MSC.302(87), IMO MSC.1/Circ.1503

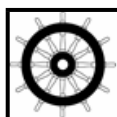
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2021-02-03**.

Issued at **Hamburg** on **2019-10-07**

DNV GL local station:
Hamburg

Approval Engineer:
Jörg Rebel



Notified Body
No.: **0098**

for **DNV GL SE**

Gerhard Aulbert
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment", signed February 27th, 2004.

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.



Product description

An ECDISPILOT & MULTIPILOT Platinum comprises the following equipment necessary for functioning:

No.	Designation	Type Designation
1	Not used	
2	Main Processing Unit Display Electronics Platinum (alternatively)	as defined in separate certificate*) including Mariner Kit for a) horizontal b) vertical installation as defined in separate certificate*)
3	Display Units 250mm (for Radar CAT 2 & ECDIS, alternatively)	as defined in separate certificate*)
4	Display Units 320mm (for Radar CAT 1 & ECDIS alternatively)	as defined in separate certificate*)
5	Operator Units (alternatively)	as defined in separate certificate*)
6	Sensor Interfaces (alternatively)	as defined in separate certificate*)
7	Network Switches (alternatively)	as defined in separate certificate*)
8	Optional Components	as defined in separate certificate*)

Software:

No.	Designation	Version no.
1	Application software	2.1.x with $x \geq 03.30$
2	Operating system of Display Electronics	Microsoft Windows 7 SP1 and Microsoft Windows 10 Pro (version numbers as defined in separate certificate*)

Application/Limitation

- IMO SN.1/Circ.MSC.1/Circ.1503: ECDIS that is not updated for the latest version of IMO Standards may not meet the chart carriage requirements as set out in SOLAS regulation V/19.2.1.4.
- Chart data formats: as defined in separate certificate*)
- System interfaces (undisturbed operation): as defined in separate certificate*)
- Backup arrangements (ECDIS): as defined in separate certificate*)

*) The Type Approval certificate TAA00002D3 for NACOS Platinum system platforms in its latest revision at the date of placing the system on the market is part of this certificate, for the relevant revision see also <https://approvalfinder.dnvgl.com/>.

Tests carried out

- Environmental and EMC testing: IEC 60945 (2002) incl. Corrigendum 1 (2008)
- Interface testing: IEC 61162-1 (2016) and IEC 61162-2 (1998)
- Presentation testing: IEC 62288 (2014)
- Performance testing: IEC 61174 Ed.4 (2015)

Type Examination documentation

DNV GL No	Document ID	Rev.	Description
6	390 008 516	22 (2019-06)	Technical Manual Multi Function Display MFD
5	390 008 504	16 (2019-06)	Technical Manual NACOS Platinum - IEC 61162-1/-2 Interface
4	390 008 810	31 (2019-08)	Operating Instructions ECDISPILOT Platinum
3	390 008 808	31 (2019-08)	Operating Instructions MULTIPLOT Platinum
2	ANC-D-0000-0146	01B	List of performance test reports for NACOS Platinum
1	TAA00002D3	Latest rev.	Certificate: DNVGL, NACOS Platinum system platforms

Marking of product

According to IEC 60945, Sect.4.9:

The product to be marked with following information, where practicable:

- Identification of the manufacturer,
- Equipment type number or model identification under which it was type tested,
- Serial number of the unit,
- Compass safe distance.

Alternatively, the marking may be presented on a display at equipment start-up, and in case of fixed equipment compass safe distance may be given in the equipment manual.

According to Article 10 of the Council Directive (MED):

- Wheel mark to be affixed visibly, legibly and indelibly to the product or to its data plate and, where relevant, embedded in its software. Where that is not possible or not warranted on account of the nature of the product, it shall be affixed to the packaging and to the accompanying documents.
- Wheel mark to be affixed at the end of the production phase.

For specific products, manufacturers may use an appropriate and reliable form of electronic tag instead of, or in addition to, the wheel mark.

END OF CERTIFICATE