

ZERTIFIKAT ◆ CERTIFICATE ◆ 認證書 ◆ CERTIFICADO ◆ CERTIFICAT



Danmark

## Marine Equipment Directive EC Type Examination Module B Certificate

This is to certify that TÜV SÜD Danmark did undertake the relevant type approval procedures for the equipment identified below, which was found to be in compliance with the Marine Equipment Directive (2014/90/EU) requirements, under the following Implementing Regulation for the listed types of equipment

<b>Implementing Regulation</b>	(EU)2019/1397
<b>Certificate Holder and Manufacturer</b>	Northrop Grumman Sperry Marine B.V. Haringbuisweg 33 3133 KP Vlaardingen The Netherlands
<b>Product(s)</b>	VisionMaster FT, ECDIS
<b>Product Sector</b>	Navigation Equipment
<b>Product Type</b>	MED/4.30 Electronic Chart Display and Information System (ECDIS) with Backup, and Raster Chart Display System (RCDS)

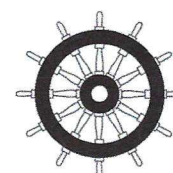
and on the basis of the Technical Data and information detailed in the Annex to this certificate.

Valid from: 16 January 2020

(Tom Twynam)

Expiry Date: 24 April 2024

This certificate has been issued in accordance with the TÜV SÜD Testing and Certification Regulations and constitutes page 1 of the combined Certificate and Annex.  
The Conditions for the validity of this certificate are listed in the Annex.  
For further details, related to this certification please contact [BABT@TUV-SUD.co.uk](mailto:BABT@TUV-SUD.co.uk)



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# Annex to Marine Equipment Directive Module B Type Examination Certificate

## 1 Equipment Description

Electronic Chart Display and Information System (ECDIS) with Backup, and Raster Chart Display System (RCDS)

### 1.1.1 Processor and Display Options

Model	Description
65901AC, 65901AN, 65901AP, 65901AT, 65901AU and 65901AE (Dual), 65901AF (Dual)	Processor
65296H, 65926P, 65926L	25.5" Display
65823A, 65923C	23.1" Display
65817G	19" Display
65926AA	25.5" Panel PC
65900AA or 65900AB	PCIO Interface Unit
65903AF, 65903AG, 65903AH, 65903KF, 65903KG, 65903KH, 67003AF, 67003KF, 67003AH, 67003KH	Control Panel
32SDR003, 32SDR004, 32SDR005 32SDR006 or 32SDT003, 32SDT004, 32SDT005 or 32SDT006 <sup>Note 2&amp;3</sup>	Security Device
65920BNAF, 65920BNAG, 65920BNBF, 65920BNBG, 65920BTAF, 65920BTAG, 65920BTBF or 65920BTBG	Integrated Tabletop Display

### 1.1.2 Ancillary Components

Model	Description
65940AA	Auxiliary PCIO Interface Unit for Dual
4802181	Network Serial Interface
4801162	External Serial Interface
4303153	Course Mode Joystick
1982776	Analogue Interface Assembly
RA00009746, RA00004325 or RA00014423	Network Switch
65900614, 65900615, 65900667, 65900668, 65900635, 65900625 and 65900670	Kit Format Units
65932605	Digital Interface Unit
67050FA	Secure Maritime Gateway

### 1.2 Software

Identity	Version
VisionMaster FT Software	12.0.0 <sup>Note 4</sup>



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## 2 Assessed Requirements

### 2.1 Implementing Regulation (EU)2019/1397

### 2.2 Compliance Requirements for MED/4.30 Notes 5, 6, 7 & 8

IMO Resolutions		International Testing Standards
Resolution MSC.232(82)	IEC 61174:2015	Electronic Chart Display & Information System (ECDIS)
Resolution MSC.191(79) Resolution MSC.302(87)	IEC 62288 (2014)	Maritime navigation and radiocommunication equipment and systems — Presentation of navigation-related information on shipborne navigational displays — General requirements
Resolution A.694(17)	IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008)	Maritime navigation and radiocommunication equipment and systems — General requirements
	IEC 61162-1 (2016)	Maritime navigation and radiocommunication equipment and systems — Digital interfaces Part 1: Single talker and multiple listeners
	IEC 61162-2 (1998)	Maritime navigation and radiocommunication equipment and systems — Digital interfaces Part 2: Single talker and multiple listeners, high-speed transmission
	IEC 61162-450 (2011) with Am 1 (2016)	Maritime navigation and radiocommunication equipment and systems — Digital interfaces Part 450: Multiple talkers and multiple listeners — Ethernet interconnection

As well as the equipment compliance with the requirements listed above this manufacturer has a proven record of software maintenance in conformity with the principles of IMO MSC.1/Circ.1503 Rev.1 (revoking IMO SN.1/Circ.266).

## 3 Technical Documentation

### 3.1 Declaration of Conformity

DoC064C VMFT ECDIS

### 3.2 User Guide

ECDIS User Guide Part No. 65900012-14

VisionMaster Ships Manual Part No.65900011V1- 19 Rev A

VisionMaster Ships Manual Part No.65900011V2- 19 Rev A

### 3.3 Test Reports

IEC 60945:2002 (inc Corr.1)	QinetiQ/EMEA/iX/CR070194/Issue 1.0, 2007-12-20	6P03819-2, 2016-09-13
	QinetiQ-MS-EES-TC0802918, 2008-10-17	103230862LHD-001, 2017-12-06
	QinetiQ-EMEA-iX-CR0709724-2, 2008-03-06	P18-0055-1, 2018-12-04
	QinetiQ-MS-EES-TSTR0801342-1, 2008-07-30	103230862LHD-001 Issue 4, 2018-01-02
	QINETIQ-MS-EES-TSTR0801840-1, 2008-09-03	21009 Rev 0, 2017-02-10
	QinetiQ-MS-EES-TSTR0900216-1.0, 2009-01-29	QinetiQ/EMEA/iX/CR0802757/Issue 1.1, 2008-02-19
	MET EMC19618-EN60945, 2006-08-28	QinetiQ-MS-EES-TC0905317, 2009-12-14
	75906944 Report 01 Issue 1, 2010-01-14	QinetiQ-MS-EES-TSTR0900779-1.0, 2009-02-24
	75931934 Report 01 Issue 1, 2015-12-16	QINETIQ/MS/EES/TSTR0903808/3.0, 2009-12-14
	75909781 Report 02 Issue 1, 2010-08-24	QINETIQ/TEG/TECS/TSTR1000308, 2010-10-22
	75919870 Report 04 Issue 1, 2013-04-29	QINETIQ/TEG/TECS/TSTR1000030, 2010-08-19
	75921754 Report 01 Issue 1, 2013-04-25	QINETIQ-MS-EES-TSTR0902273-1, 2009-06-03
	BO613465/1, 2004-12-24	QinetiQ-TEG-TECS-TSTR1100065-Issue 3.0, 2011-02-28
	2008-3142 Rev 01, 2008-03-11	QinetiQ/TEG/TECS/TC1100272, 2011-02-02
	2008-3464 Rev 02, 2008-09-18	QinetiQ/MS/EES/TC0803242, 2008-11-14
	2010-3124 Rev 02, 2010-04-20	QINETIQ-MS-EES-TSTR1001283, 2010-04-26
	2005-3112 Rev 01, 2005-03-14	QINETIQ-TEG-TECS-TSTR1101456-1.0, 2011-05-04
2008-3143 Rev 01, 2008-03-11	QINETIQ/MS/WD/TSTR1201598, 2012-07-03	

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## Test Reports - continued

	DNV 2013-3038 Rev 00, 2013-04-03	QinetiQ/TEG/TECS/TSTR1102226, 2011-08-22
	DANAK-196393, 2002-09-04	JA 340-8596-1, 2006-07-14
	DANAK-198181, 2005-12-23	JA 340-8596-2, 2006-05-08
	DANAK-198236, 2006-01-20	JA 340-8596-4, 2006-03-16
	DANAK-1911472, 2011-07-18	TL1016, 2006-10-30
	DANAK-19/12564, 2012-11-02	TL1316, 2009-06-29
	DANAK-198899 Revision 2, 2007-12-10	254678, 2014-03-12
	DANAK-1910255, 2008-08-18	E12140.01, 2012-08-01
	DANAK-1910681 Revision B, 2010-01-25	416.095.1, 2016-06-17
	5P05969-1, 2015-10-30	416.095.2, 2016-05-11
	4P07869, 2014-12-05	416.095.3, 2016-05-18
	4P00022-2, 2014-05-06	962, 2017-03-08
	5000657, 2007-06-28	8P06394 CSD, 2018-08-27
IEC 61174:2015	TR-V9-NML-001, 2017-04-19	TR-V10.0.1-NML-008, 2018-02-12
	TR-V9-NML-002, 2017-04-19	TR-V12-NML-031, 08-08-2019
	TR-V10-NML-003, 2017-10-11	TR-V12-NML-032, 2019-08-08
	TR-V10-NML-006, 2017-09-18	TR-V11.1-NML-022, 2019-01-14
IEC 62288:2014	TR-V10-NML-004, 2017-09-18	TR-V10.0.1-NML-010, 2018-02-12
	ECDIS Monitor (LCD) Test Procedure and Report, 2005-04	TR-V10.0.1-NML-011, 2018-02-12
	DOC102351-1 Rev 2, 2017-04-05	TR-V10-NML-004, 2017-09-18
	DOC102352-3 Rev 1, 2016-11-11	TR-V11-NML-017, 2018-11-12
	DOC102352-4 Rev 2, 2017-04-03	362879 Issue 00, 2018-11-06
	TR-V12-NML-028, 2019-09-02	TR-V11.1-NML-021, 2018-12-20
IEC 61162 Series	BSH 46162-0040380-07, 2007-09-12	TR-V11-NML-015, 2018-11-12
	TR-V12-NML-029, 2019-09-02	TR-V12-NML-030, 2019-08-08
Miscellaneous	VisionMaster FT Release 10.0.0 System Performance Test Report, 2017-11-27	TR-V12-NML-033, 2019-08-08
	TR-V11-NML-019 (System Performance Test), 2018-11-12	TR-V11.1-NML-023, 2018-12-20
	TR-V10.0.1-NML-012, 2018-02-16	TR-V11.1-NML-024, 2019-01-03
	TR-V11-NML-019, 2018-11-12	-

## 3.4 Build Status

### 3.4.1 Hardware

VisionMaster FT Technical File VMFTRPRT Issue 13

Dated

2019-10-28

## 3.5 Notes

- Note 1 An uninterruptable power supply must be incorporated in the system, the NGSM part number 65932721, 65932722 or 65932723 may be used.
- Note 2 The 32SDR005 or 32SDT005 Multi-node security device allows operation of an integrated multi display ships bridge. A security string defines the product type on all the nodes for a particular vessel's bridge operating plan. The product type must be set to ECDIS, ECDIS with Radar overlay or Total Watch as appropriate.
- Note 3 A Total Watch product enables operation as a Multi-Function workstation and allows the operator to switch between Chart Radar, ECDIS and conning display. This certificate only applies when the mode is set to ECDIS for a Total Watch System.
- Note 4 This approval remains valid for equipment including subsequent minor software amendments which have been formally accepted in accordance with the TÜV SÜD Testing and Certification Regulations
- Note 5 The ECDIS was tested with official IHO ENC Test Data using the Seven Cs chart engine and with SENC data supplied as part of C Map chart licensing. ARCS chart test data was used to check RCDS charts.
- Note 6 Conformance with the IHO S-52 'Specifications for Chart Content and Display Aspects of ECDIS' Edition 6.1(1) and IHO S-52 Annex A 'IHO Presentation Library' Edition 4.0(2) was demonstrated using IHO S-64 'Instruction Manual for the use of IHO Test Data Sets in ECDIS' Edition 3.0.2.
- Note 7 (EU)2019/1397 gives a last placing on board date of 29/08/2021 for equipment approved against the test standards listed above. See Conditions of Validity.
- Note 8 Image Transfer to a Voyage Data Recorder via IEC 61162-450 Interface.
- Note 9 The VisionMaster FT is certified for use as a back-up ECDIS only when connected to a main ECDIS running VisionMaster FT at the same version.

# Annex to Marine Equipment Directive Module B Type Examination Certificate



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## 4 Additional Information

The products listed on this certificate were originally assessed and certified by Lloyds Register Verification under Notified Body number 0038. This certificate replaces Lloyds Register Verification Certificate Number MED 1900006-M2.

## 5 U.S. Coast Guard Number

This product has been assigned U.S. Coast Guard Module B number

165.123/EC2443 (ECDIS)  
165.124/EC2443 (ECDIS Backup Equipment)

To note type approval to Module B only as it pertains to obtaining US Coastguard approval 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", Decision No. 1/2018, signed February 18th, 2019

## 6 Conditions of Validity

This certificate ceases to be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with TÜV SÜD Danmark or a person appointed by TÜV SÜD Danmark to perform that role.

Should the specified regulations (international conventions and the relevant resolutions and circulars of the IMO) or the testing standards be amended and enforced through an Implementing Regulation during the period of validity of this certificate, the product(s) is/are to be re-approved prior to it/them being placed on the market or onboard vessels to which the amended regulations or standards apply.

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-control phase module (D, E, or F) of Annex B of the directive is fully complied with and controlled by a written inspection agreement with a notified body.

Signature: T. J. Twynam Date: 2020-01-16  
Print Name: Tom Twynam  
On behalf of TÜV SÜD Danmark