

Marine Equipment Directive EC Type Examination Module B Certificate

This is to certify that TÜV SÜD DANMARK ApS 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

Implementing Regulation	(EU)2020/1170
Certificate Holder and Manufacturer	Northrop Grumman Sperry Marine B.V. Haringbuisweg 33 3133 KP Vlaardingen The Netherlands
Product(s)	VisionMaster FT, Track Control
Product Sector	Navigation Equipment
Product Type	MED/4.33 Track Control System (working at ship's speed from minimum manoeuvring speed up to 30 knots)

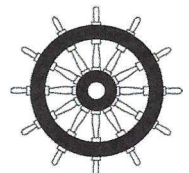
and on the basis of the Technical Data and information detailed in the Annex to this certificate.

Valid from: 14 October 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



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1 Equipment Description

Track Control System

1.1.1 Processor and Display Options

Part No.	Description
65901AC, 65901AN, 65901AP, 65901AT, 65901AU and 65901AE (Dual), 65901AF (Dual)	Processor
65926H, 65926P, 65926L	25.5" Display
65823A, 65923C	23.1" Display
65817G	19" Display
65926AA	25.5" Panel PC
65926AB	25.5" Slimline Panel PC
65900AA or 65900AB	PCIO Interface Unit
65903AF, 65903AG, 65903AH, 65903KF, 65903KG, 65903KH, 67003AF, 67003KF, 67003AH or 67003KH	Control Panel
32SDR003, 32SDR004, 32SDR005 32SDR006 or 32SDT003, 32SDT004, 32SDT005 or 32SDT006 ^{Note 2&3}	Security Device
65920BNAF, 65920BNAG, 65920BNBF, 65920BNBG, 65920BTAF, 65920BTAG, 65920BTBF, 65920BTBG, 65920CNAF, 65920CNAG, 65920CNBF, 65920CNBG, 65920CTAF, 65920CTAG, 65920CTBF or 65920CTBG	Integrated Tabletop Display
4960 and software 020800-0000-000 Rev L or Rev M	Navpilot 4000+ Control and Display Unit (CDU)
4961 and software 020801-0000-000 Rev L or Rev M	Navpilot 4000+ Steering Display Unit (SCU)

1.1.2 Ancillary Components

Part No.	Description
4802181	Network Serial Interface
4801162	External Serial Interface
4303153	Heading Mode Joystick
1982776	Analogue Interface Assembly
RA00009746, RA00004325 or RA00014423	Network Switch
65900614, 65900615, 65900667, 65900668, 6590063, 65900625 and 65900670	Kit Format Units
67050FA	Secure Maritime Gateway

1.2 Software

Identity	Version
VisionMaster FT Software	12.4.0 ^{Note 4}



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2 Assessed Requirements

2.1 Implementing Regulation (EU)2020/1170

2.2 Compliance Requirements for MED/4.33 Notes 5

IMO Resolutions		International Testing Standards
Resolution MSC.74(69)	IEC 62065 (2014)	Maritime navigation and radiocommunication equipment and systems — Track Control Systems
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

3 Technical Documentation

3.1 Declaration of Conformity

DoC071D VMFT Track Control

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	4P00022-2, 2014-05-06
	QinetiQ/MS/EES/TC0802918, 2008-10-17	5000657, 2007-06-28
	QinetiQ/EMEA/iX/CR0709724/2, 2008-03-06	6P03819-2, 2016-09-13
	QinetiQ/MS/EES/TSTR0801342/1, 2008-07-30	103230862LHD-001, 2017-12-06
	QINETIQ/MS/EES/TSTR0801840/1, 2008-09-03	P18-0055-1, 2018-12-04
	QinetiQ/MS/EES/TSTR0900216/1.0, 2009-01-29	103230862LHD-001 Issue 4, 2018-01-02
	MET EMC19618-EN60945, 2006-08-28	21009 Rev 0, 2017-02-10
	75906944 Report 01 Issue 1, 2010-01-14	QinetiQ/EMEA/iX/CR0802757/Issue 1.1, 2008-02-19
	75931934 Report 01 Issue 1, 2015-12-16	QinetiQ/MS/EES/TC0905317, 2009-12-14
	75909781 Report 02 Issue 1, 2010-08-24	QinetiQ-MS-EES-TSTR0900779-1.0, 2009-02-24
	75919870 Report 04 Issue 1, 2013-04-29	QINETIQ/MS/EES/TSTR0903808/3.0, 2009-12-14
	75921754 Report 01 Issue 1, 2013-04-25	QINETIQ/TEG/TECS/TSTR1000308, 2010-10-22
	BO613465/1, 2004-12-24	QINETIQ/TEG/TECS/TSTR1000030, 2010-08-19
	2008-3142 Rev 01, 2008-03-11	QinetiQ/TEG/TECS/TC1100272, 2011-02-02
	2008-3464 Rev 02, 2008-09-18	QINETIQ/MS/WD/TSTR1201598, 2012-07-03
	2010-3124 Rev 02, 2010-04-20	QinetiQ/D&TS/SS/CR0607592/1.0
	2005-3112 Rev 01, 2005-03-14	JA 340-8596-1, 2006-07-14
	2008-3143 Rev 01, 2008-03-11	JA 340-8596-2, 2006-05-08
	DNV 2013-3038 Rev 00, 2013-04-03	JA 340-8596-4, 2006-03-16
	DANAK-196393, 2002-09-04	TL1016, 2006-10-30
	DANAK-198181, 2005-12-23	TL1316, 2009-06-29
	DANAK-198236, 2006-01-20	254678, 2014-03-12
	DANAK-19/12564, 2012-11-02	416.095.1, 2016-06-17
	DANAK-198899 Revision 2, 2007-12-10	416.095.2, 2016-05-11
	DANAK-1910255, 2008-08-18	416.095.3, 2016-05-18
	DANAK-1910681 Revision B, 2010-01-25	962, 2017-03-08
	5P05969-1, 2015-10-30	8P06394 CSD, 2018-08-27
4P07869, 2014-12-05	EMV-05-5061-1, 2005-04-12	



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Test Reports - continued

IEC 60945:2002 (inc Corr.1) -continued	75947558 Report 01 Issue 01, 2020-01-09	P19-0070, 2019-04-24
	P19-0152-1, 2019-09-03	5P03620_rev1, 2015-10-16
	75948540 Report 01 Issue 1, 2020-06-12	75948540 Report 02 Issue 2, 2020-06-22
IEC 62065:2014	QinetiQ/EMEA/iX/CR0709442, 2008-04-11	TR-V11-NML-016, 2018-11-12
	QinetiQ/MS/EES/TSTR0901740/1., 2009-04-20	TR-V10.0.1-NML-008, 2018-02-12
	TR-V10.0.1-NML-007, 2018-02-12	TR-V12-NML-031, 08-08-2019
	TR-V10.0.1-NML-009, 2018-02-12	TR-V12-NML-032, 2019-08-08
	TR-V11-NML-014, 2018-11-12	TR-V12-NML-027, 2019-08-08
	TR-V12-NML-026, 2019-08-08	TR-V12.4-NML-051 Issue 01, 2020-09-24
IEC 62288:2014	ECDIS Monitor (LCD) Test Procedure and Report, 2005-04	TR-V10.0.1-NML-010, 2018-02-12
	DOC102351-1 Rev 2, 2017-04-05	TR-V10.0.1-NML-011, 2018-02-12
	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
	TR-V12.2-NML-042 Issue: 1, 2020-02-20	278-226, 2020-06-17
	TR-V12.4-NML-055 Issue: 1, 2020-09-30	-
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
	TR-V12.2-NML-039 Issue: 1, 2020-02-20	TR-V12.2-NML-043 Issue: 1, 2020-02-20
Miscellaneous	TR-V10.0.1-NML-012, 2018-02-16	TR-V11.1-NML-023, 2018-12-20
	TR-V11-NML-019, 2018-11-12	TR-V11.1-NML-024, 2019-01-03
	TR-V12-NML-033, 2019-08-08	TR-V12.2-NML-041 Issue: 1, 2020-02-20
	TR-V12.4-NML-049 Issue 1, 2020-10-01	-

3.4 Build Status

3.4.1 Hardware

VisionMaster FT Technical File VMFTRPRT Issue 13

Dated

2019-10-28

3.5 Notes

- Note 1 This equipment also provides a remote interface to the ships propulsion controller and is compliant with Route Based Speed Control as defined in IEC 62065 Annex B, as well as Manual Speed Control.
- 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 (EU)2020/1170 gives a last placing on board date of 29/08/2021 for equipment approved against the test standards listed above. See Conditions of Validity.

4 U.S. Coast Guard Number

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

165.112/EC2443

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



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5 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 ApS or a person appointed by TÜV SÜD DANMARK ApS to perform that role.

Should the specified regulations (internal conventions and the relevant resolutions and circulars of the IMO) or standards be amended and enforced through an Implementing Regulation during the validity of this certificate, the product(s) is/are to be reapproved 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*

(Tom Twynam)

Date:

2020-10-14

On behalf of TÜV SÜD DANMARK ApS